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The Origins and Adaptations of the Principles of War

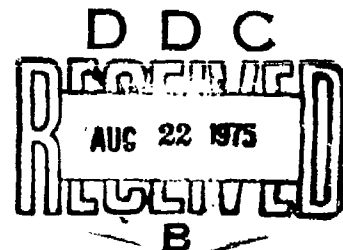
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The origins and adaptation of principles of war into the doctrine of certain western powers has been shrouded in doubt and confused by widely-held misconceptions. By examining the military thought, as expressed in books and articles on the theory of war, in lectures delivered at prominent schools of war, and in official publications of France, Germany, Great Britain and the United States, the varying concepts of principles of war held by these nations can be viewed, and the forces which influenced their development can be, in some cases identified, and in others suggested.

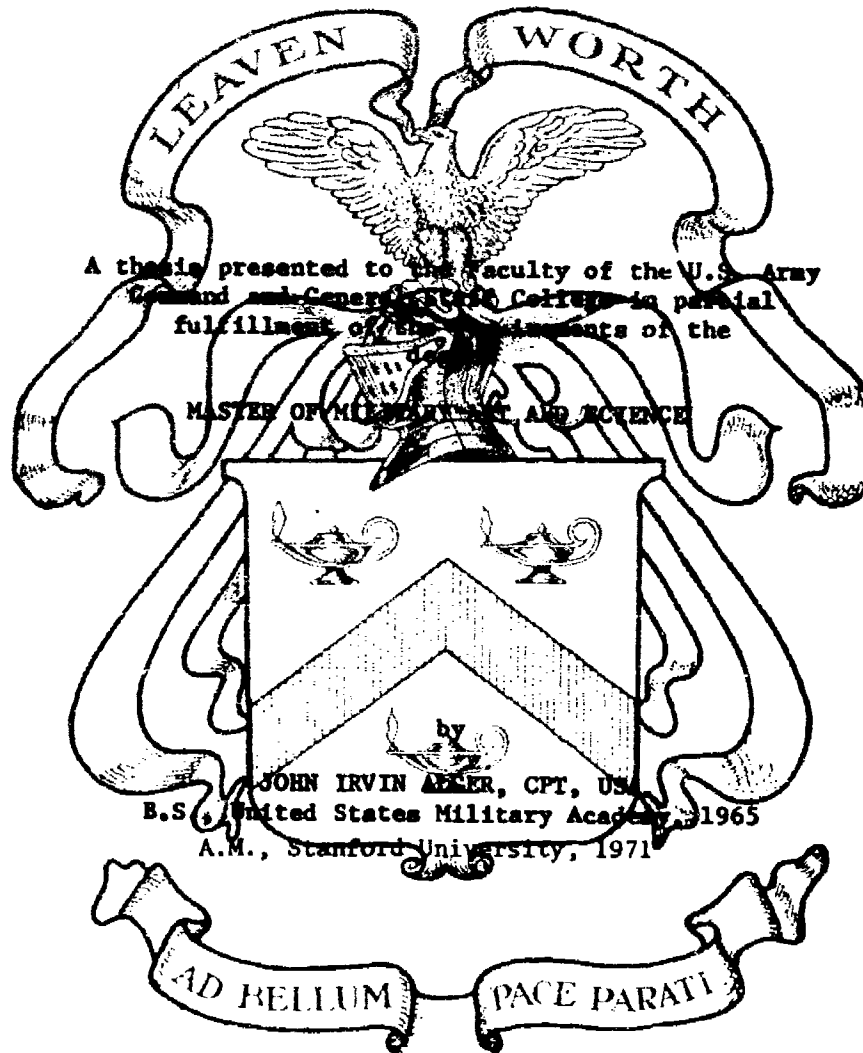
The prevailing modern view of principles of war, that they are few in number and can be easily expressed, originated in the Napoleonic era, but until the revision of service manuals in the post-World War I era, the principles were rarely expressed as definite lists of aphorisms.

Many individuals contributed to the modern expression and acceptance of principles of war, but of far greater influence was the great variety of impersonal forces that created different concepts of principles in the four nations examined in this study. In spite of common experiences, and the borrowing and sharing of ideas among the western powers on the conduct of war, its principles have assumed chameleon-like characteristics.

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THE ORIGINS AND ADAPTATION
OF THE PRINCIPLES OF WAR



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The opinions and conclusions expressed herein are those of the individual student author and do not necessarily represent the views of either the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE ORIGINS AND ADAPTATION OF THE PRINCIPLES OF WAR

John I. Alger, MMAS
1975

The origins and adaptation of principles of war into the doctrine of certain western powers has been shrouded in doubt and confused by widely-held misconceptions. By examining the military thought, as expressed in books and articles on the theory of war, in lectures delivered at prominent schools of war, and in official publications of France, Germany, Great Britain and the United States, the varying concepts of principles of war held by these nations can be viewed, and the forces which influenced their development can be, in some cases identified, and in others suggested.

The prevailing modern view of principles of war, that they are few in number and can be easily expressed, originated in the Napoleonic era, but until the revision of service manuals in the post-World War I era, the principles were rarely expressed as definite lists of aphorisms. This format has become widely accepted in Great Britain and the United States and to a lesser degree in France, but the origins of the concept have been generally misunderstood—especially since World War II. Some commentators have traced the origins of the modern principles to Ferdinand Foch, some to Clausewitz and some to J. F. C. Fuller. A good case can be made for Fuller, but still severe difficulties in discovering the origins exist. Part of the difficulty resulted from the recollections of Fuller, whose role in the origins has been overstated in his memoirs and in other

of his many publications. Part of the difficulty resulted from the fact that the origins of concepts are often elusive and from the fact that concepts often become widely accepted before they are articulated in written form.

The first nation to officially adopt a definitive list of principles of war was Great Britain. They appeared in the Field Service Regulations (Provisional) of 1920. A list, clearly influenced by the official British list, appeared in United States Training Regulations in the following year. The British principles were brought to the United States' doctrine via the lectures of a faculty member at the United States General Staff College. This transition was especially significant, for the concept of principles espoused by Fuller and the British was explicitly rejected in the immediate post-World War I period in France and Germany where Fuller and other British authors were widely studied and emulated. But even in France and Germany a trend toward the more definitive identification of principles of war has been evident since World War I.

The history of the origins and adaptation of the modern concepts of principles of war would be incomplete without an attempt to reveal at least some of the forces which encouraged the trend toward the more definitive statement of principles. The mass armies of the twentieth century created the need for a doctrine of war which could be readily inculcated into the mind of the mobilized citizen-soldiers. Science and technology, which were intimately connected to many of the activities of war, affected the way men thought about their tasks, and ideas about the conduct of war tended toward the simple and definitive expressions

found in the language of science. Military history, encouraged in the curricula of nearly all modern military schools, found justification in the belief that the study of the past would reveal and reinforce the true principles of war as demonstrated by the greatest captains of the past. The schools themselves were instrumental forces in the trend, for the teacher's first task has been to simplify the complexities of war for the benefit of the student. The principles of war ideally fulfilled this requirement.

Many individuals contributed to the modern expression and acceptance of principles of war, but of far greater influence was the great variety of impersonal forces that created different concepts of principles in the four nations examined in this study. In spite of common experiences, and the borrowing and sharing of ideas among the western powers on the conduct of war, its principles have assumed chameleon-like characteristics.

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Correct theories, founded upon right principles,
sustained by actual events of wars, and added to
accurate military history, will form a true school
of instruction for generals.

JOMINI
1838

Chapter I

INTRODUCTION

The principles of war appropriately serve many needs: they provide a language for strategical discussion; they serve as guides for the proper conduct of war; they are often used to facilitate the study of military history; and they provide a simple expression of many of the intricacies and complexities of war. The merit of principles in the study and understanding of complex disciplines is well known to scholars, and the existence of principles of falling bodies or of planetary motion is known to nearly every schoolboy. But the principles of war differ markedly from the principles of other disciplines. They are expressed neither as algebraic formulae, e.g., $F=ma$, nor as often debated philosophical truths like the principles of Christian morality. Though the generally accepted concepts regarding the principles of war differ from age to age and even from army to army, the principles of war have been, at least in English-speaking lands for the past half-century, expressed as a brief list of titles that purportedly represent the ultimate truths concerning the conduct of war. For example, a 1920 British list summarized the principles as: maintenance of the objective, offensive action, surprise, concentration, economy of force, security, mobility and co-operation.¹ An American admiral, Henry E. Eccles,

¹Great Britain. War Office, Field Service Regulations, Vol 2, Operations, 1920, pp. 14-15.

included the objective, the offensive, concentration, mobility, economy of effort, co-operation, security, surprise and simplicity in a list published in 1965.² The content of the lists has varied as well as the concepts concerning the form of the principles, and such changes inherently suggest that the principles of war are not true and scientific principles, but rather tools of dilettante pedagogues and unwitting pedants. Through inquiry into the origins of these lists of titles and the differing ideas concerning the concepts of principles of war, a greater understanding of their merits and limitations can be gained. To identify the genesis of an idea is admittedly difficult, but to ignore the genesis of widely-held ideas can too often be destructive.

The term "principles of war" did not always connote the idea of a list of rules intended to facilitate the conduct of war. In fact, two distinct definitions of the term have been widely used. First, the principles of war represented a commonly accepted philosophy concerning the myriad of activities that collectively compose the conduct of war. In the present century, however, the idea that the principles of war are an enumerated list of considerations, few in number, capable of being simply expressed and essential to the successful conduct of war, has become increasingly accepted.³ The former definition was used by writers on war for centuries, but the latter, though it has become the standard in English-speaking nations, originated in the Napoleonic

²Henry E. Eccles, Military Concepts and Philosophy (New Brunswick, New Jersey, 1965), pp. 108-112.

³Bernard Brodie made a similar distinction in his lecture, "Principles of War and Their Application in Atomic Warfare," delivered at the Command and General Staff College, Fort Leavenworth, Kansas, 7 March 1957.

era---quite possibly with Napoleon himself. In a conversation with Marshal Saint Cyr, he

. . . utterly denied the difficulties of the art of war, which he said were far from being understood. He added that if he ever had the time he would write a book in which he would demonstrate the principles of the art, in so clear a manner, that they would be within the comprehension of every military man.⁴

A similar thought dominated the theoretical works of Antoine-Henri Jomini, one of Napoleon's most influential proselytes. Jomini wrote in 1837:

. . . twenty years of experience have but fortified me in the following convictions: "There exists a small number of fundamental principles of war, which could not be deviated from without danger, and the application of which, on the contrary, has been in almost all time crowned with success."⁵

This Jominian concept of the principles of war has influenced generations of military writers and pedagogues.

Two schools of thought, however, have developed from Jomini's concept. A few writers took the view that since the principles of war were few in number, they could be definitively identified and expressed in a brief list. Patrick L. MacDougall was an early exponent of this school. In his Theory of War, first published in 1856, he provided a list of three principles of war which he claimed were derived from Jomini's writings:

⁴Gouvion de Saint Cyr, Mémoires pour servir à l'histoire militaire, sous le Directoire, le Consulat, et l'Empire, Vol 1. As quoted in Frances James Soady, Lessons of War as Taught by the Great Masters and Others (London, 1870), pp. 8-9.

⁵J. D. Hittle (ed), Jomini and His Summary of the Art of War (Harrisburg, 1952), p. 43.

1. To place masses of your army in contact with factions of your enemy.
2. To operate as much as possible on the communications of your enemy without exposing your own.
3. To operate always on interior lines.⁶

The second school maintained that in spite of the recognition that a few principles of war existed, the principles could not be enumerated with the assurance that any resulting list would be all-inclusive. Alfred Thayer Mahan was one of the great exponents of this school. He offered no list of principles, but he, nevertheless, maintained that the comprehension of warfare consists "in the apprehension and acceptance—the mental grasp—of a few general principles, elucidated and formulated by admitted authorities upon the subject"⁷ This second school dominated the teaching and the theoretical writings on war until World War I. The second school also popularized the use of aphorisms or titles to refer to the identified principles. Edward Hamley, author of the Operations of War, the English soldier's vade mecum for nearly half a century, wrote in 1866, "It would be difficult to say what these rules are, or in what code they are embodied," but he often referred to the principle of concentration.⁸ Mahan lectured frequently on the principles of concentration, of central line, of interior lines of movement, cooperation and unity of purpose. Since this second school

⁶Patrick L. MacDougall, The Theory of War Illustrated by Numerous Examples from Military History (2d ed.; London, 1858), p. 51.

⁷Alfred T. Mahan, Lessons of the War with Spain and Other Articles (Boston, 1899), p. 4.

⁸Edward Bruce Hamley, The Operations of War Explained and Illustrated (5th ed.; Edinburgh and London, 1888), pp. 62 and 92.

dominated the theoretical writings on war in the late nineteenth and early twentieth centuries, the same concept of principles understandably appeared in the official handbooks and manuals on the conduct of war that appeared during the same time period. The concept was shared by the major Western powers. The British Field Service Regulations of 1909 stated, "The fundamental principles of war are neither very numerous nor in themselves abstruse, but the application of them is difficult"⁹ The United States Field Service Regulations of 1914 paraphrased the British statement. The French and German regulations of this period contained long descriptive paragraphs on such subjects as marches, the attack and bivouacs; most of the subjects were introduced by a subparagraph containing a few "general principles." A list of principles and hence the switch to the first interpretation of the Jominian definition occurred in the British Field Service Regulations Volume II, Operations (Provisional) of 1920, and a similar list appeared in the United States Army Training Regulations 10-5 in December 1921.¹⁰ In France the list definition gained currency in the pre-World War I teaching and writings of Ferdinand Foch, but it was not elevated to doctrine until 1936. The German army has continually rejected the idea of the principles of war as a definitive list of considerations necessary for the successful conduct of war. Lists did exist, however, in the writings of some very influential nineteenth century German theorists.

⁹Great Britain, War Office, Field Service Regulations, 1909, p. 13. It was this sentence that J. F. C. Fuller cited as the instigator of his search for a definitive list of principles of war. See Chapter II.

¹⁰The list did not appear in the US Field Service Regulations until 1949. See Chapter III.

Success in a major twentieth century war appears to be a necessary prerequisite to the ken and enumeration as doctrine of a list of principles of war.

Since the acceptance of the principles of war into the doctrine of France, Great Britain and the United States, the principles as a list have been variously defined, defended and denounced. Major-General Sir Frederic Maurice warned in his lectures at the University of London and at the British Staff College in the 1920s that the principles of war were not formulae for use in war, but guides to direct the thought of war in the right direction.¹¹ Cyril Falls, the renowned British military historian of the present century, wrote, ". . . they are conveniences, which some successful soldiers have never even tried to remember and have neglected without, so far as we can tell, suffering for lack of them" ¹² One of America's well-known military historians, Theodore Ropp, spoke of the principles as "those principles of action which can be illustrated by the military events of any historical period, the maxims of the soldier's trade."¹³ The concept of a definitive list of principles has not, however, encountered assenting definitions on all occasions. Indeed, criticism has abounded since their enunciation as doctrine. The political scientist, Bernard Brodie, referred to the lists as a "corruption" of the twentieth century, and the US Admiral, J. C.

¹¹ Frederic Maurice, British Strategy, A Study of the Application of the Principles of War (London, 1925), p. 1.

¹² Cyril Falls, Ordeal by Battle, p. 9.

¹³ Theodore Ropp, War in the Modern World (New, Rev. ed.; New York, 1967), p. 12.

Wylie labelled them "an unaware substitution of slogan for thought."¹⁴ John Keegan, Professor of Military History at the Royal Military Academy, Sandhurst, has scored the listed principles of war on the grounds of their obscure meaning, their exclusiveness, their internal contradiction and their historical invalidity.¹⁵

The purpose of this study is not to assume a position in the debate concerning the usefulness or validity of the list concept nor of the individual principles. Periodicals and modern theoretical works abound with such polemics. But a working definition of the "principles of war" in light of the debate that will allow the term to be used in proper historical context throughout the period of their origin and through the period of their development is needed. To provide such a definition, a single principle is first defined: a principle of war is a fundamental truth or a general statement, or a word or an aphorism which represents such a truth or statement, that is an essential consideration in the "strategy" of a successful military operation. The principles of war are then a collection of such principles where their total number is small, but not necessarily finite. This definition can be applied to the more modern use of the term, and it also encompasses the Jominian belief in the existence of a small, but indefinite, number of principles.

If one semantic difficulty is solved by the definition of the principles of war given above, another is created by the use of the

¹⁴J. C. Wylie, Military Strategy: A General Theory of Power Control (New Brunswick, New Jersey, 1967), p. 20 and Bernard Brodie, "Strategy," International Encyclopedia of the Social Sciences (1968), XV, p. 283.

¹⁵John D. Keegan, "On the Principles of War," Military Review, XLI (December 1961), 61ff.

word "strategy." Colonel G. F. R. Henderson, one of the most popular and able teachers and writers of the late Victorian army, wrote in 1902, "The exact meaning of the word 'strategy' is as generally misunderstood as the study of the art it describes is generally neglected."¹⁶ The misunderstanding of the definition of strategy has increased since that date--possibly as a result of increased attention to its study. Popular as well as scholarly definitions at the one extreme concern the small-unit leader on the battlefield and at the other concern only the chiefs of state of warring powers. The problem of identifying the level at which strategy exists is exacerbated by attempts to reconcile strategy with its symbiotic partner, tactics. Since the concept of the principles of war originated in the realm of Napoleonic strategy and since the principles' applicability has recently been surreptitiously shifted to the realm of tactics, the etymology of both of these terms is necessary to properly understand the origins and development of the principles of war.

The word "strategy" is derived from the Greek word "strategos," which means "generalship" or the "the art of the general;" tactics is derived from the Greek "taktos" meaning "ordered" or "regulated." The identification of major branches within the art of war was rarely made before the Napoleonic era, for the art of war was in its entirety the art of the general. Thus, Raimondo Montecuccoli, Italian count and successful generalissimo of the Austrian Habsburgs during the devastating wars of the seventeenth century, devoted the first part of his

¹⁶G. F. R. Henderson, "Strategy," Encyclopaedia Britannica Supplement (1902), p. 39.

treatise on the art of war to the broad considerations which precede the undertaking of war while the second part of the work is devoted to such mundane tasks associated with leadership in war as the obtaining of rations, the maintenance of discipline and instructions on the conduct of marches and castrametation. The final section of the work deals again with broad considerations upon the conclusion of war.¹⁷

In the mid-eighteenth century, Frederick the Great provided another excellent example of the ideas and considerations essential to the understanding of generalship in the pre-Napoleonic period. In his Instructions for the Generals who Command Detachments, Wings, Second Lines and Prussian Armies, which he revised in 1748 as General Principles of War, he began with a discussion of desertion, followed by a discussion of the qualities and merits of Prussian troops.¹⁸ His third topic was campaign plans which was followed by sections on rations, both food and drink and forage. Sections on ruses, espionage, security measures and various types of special operations, such as river crossings and retreats, were also included. Each of the diverse activities described by these writers was the proper province of the general and could be termed strategy in its original, literal sense. The term "tactics" applied to the ordered arrangements of the troops to and on the field of battle. As late as 1801, a popular military dictionary

¹⁷Raimondo Montecuccoli, Abhandlung ueber den Krieg (Trattato della Guerra), pp. 12-13 in Ausgewählte Schriften des Raimund Fürsten Montecucculi General-Lieutenant und Feld-Marschall, Vol. I (Wien and Leipzig, 1899).

¹⁸See Frederick II, Instruction pour les généraux qui auront à commander des detachments, des ailes, des secondes lignes et des armées prussiennes [(Berlin, 1753)].

published in Paris did not define strategy though it did define "strategème," a ruse de guerre or a method of defeating or overcoming the enemy.¹⁹ "La tactique" was defined as "the science of military movement."²⁰ Strategy increasingly assumed the connotations of the word "strategème" during the Napoleonic era, and the art of the general, which in Montecuccoli's time and Frederick's had encompassed the broad range of activities described in their respective treatises on war, became associated with the planning of the conduct of war. Battle plans were made on the map, and after studying the campaigns of Frederick and Napoleon, Jomini defined strategy simply as war upon the map.²¹ Jomini also viewed strategy as one of six distinct branches which made up the art of war. The others were: statesmanship, grand tactics, logistics, the art of the engineer and elementary tactics.²²

The division of the art of war into several branches brought with it a torrent of definitions which sought to keep pace with the rapid technological and ideological changes that profoundly affected war in the post-Napoleonic era. Strategy was the most elusive of the branches to define; "no military term, perhaps no technical term of any kind, has undergone more changes in meaning, suffered more attempts

¹⁹A. T. Gaigne, Nouveau dictionnaire militaire (Paris, 1801), p. 592.

²⁰Ibid., p. 599.

²¹Hittle, p. 66.

²²Antoine-Henri Jomini, Summary of the Art of War, trans. O. F. Winship and E. E. McLean (New York, 1854), p. 23.

to reach a standard definition, or been more diversely interpreted."²³

Its distinction from tactics has been especially difficult. Dennis Hart Mahan, father of Alfred Thayer Mahan and himself the teacher of generations of soldiers and generals, said of strategy and tactics:

Strategy is, in a peculiar sense, the science of generals in command of armies whilst tactics . . . belongs to officers of all grades. Still with these marked differences, it is sheer pedantry to pretend to define the precise limits of these two prominent branches of the military art, as they present a multitude of²⁴ exceptions in which they approach and run into each other.

In spite of the overlap of strategy and tactics seen by Mahan, he remained close to the Greek meanings of "strategos" and "taktos." He defined tactics as the "art of drawing and moving troops systematically."²⁵ In Henry Scott's Military Dictionary (1861), however, the Greek ideas were less apparent. Scott defined strategy as the "art of concerting a plan of campaign" and tactics as the "art of handling troops."²⁶ In 1870 a British colonel, Frances James Soady, ironically reported in a treatise on war:

The distinction between strategy and tactics, is comparatively of modern date, but it is now thoroughly understood, and the two subjects are considered separately at all our military colleges.

²³Basil H. Liddell-Hart, "Strategy," Encyclopedia Britannica (1929), XXI, 452.

²⁴Dennis Hart Mahan, Advanced-Guard, Outpost, and Detachment Service of Troops, with the Essential Principles of Strategy and Grand Tactics for the Use of Officers of the Militia and Volunteers (New ed.; New York, 1863), p. 170.

²⁵Ibid., p. 32.

²⁶Henry L. Scott, Military Dictionary (New York, 1864), pp. 574 and 601.

Strategy is the science of moving troops in the whole theatre of war. Tactics, the art of handling troops in the presence of the enemy.²⁷

In both the United States and Great Britain, staff college students were served the following in the late nineteenth century:

Strategy is the art of moving an army in the theater of operations, with a view to placing it in such a position, relative to the enemy, as to increase the probability of victory, or lessen the consequences of defeat. Tactics is the art of disposing and maneuvering troops on the field of battle²⁸

Alfred Mahan attempted to clarify the continuing impingement of strategy and tactics by the single word "contact." The movements of a military force in contact with the enemy belonged to the realm of tactics while movements when not in contact were defined as strategy.²⁹ General Bonnal, as a teacher at the French War College, defined strategy as the art of conceiving and tactics as the art of executing.³⁰ Matthew F. Steele, a respected teacher at the Army Staff School, Fort Leavenworth, remarked in a lecture in 1907:

Modern military writers, from Jomini down to our own lamented Wagner, have nearly all undertaken to define the word strategy; they have given us definitions as various as the writers were numerous. . . . Of a truth, the word strategy cannot be defined; its meaning must be arrived at by a process of absorption.³¹

²⁷Frances James Soady, Lessons of War as Taught by the Great Masters and Others (London, 1870), p. 23.

²⁸Arthur L. Wagner, Organization and Tactics (2d ed.; Kansas City, Missouri, 1897), p. 1. Wagner acknowledged some years after Organization and Tactics appeared that his definition was derived from "several able paragraphs of Hamley's Operations of War."

²⁹A. T. Mahan, The Influence of Sea Power Upon History (7th ed.; Boston, 1894), p. 8.

³⁰Gabriel Darrieus, War on the Sea, Strategy and Tactics, Basic Principles, trans. Philip R. Alger (Annapolis, 1908), p. 10.

³¹Matthew F. Steele, "Conduct of War," Military Service Institute Journal, XLII (Jan-Feb 1908), 27.

The experiences of World War I were not especially helpful in solving the semantic problem, either. William K. Naylor, also of the United States Staff School, wrote after the war, "Some deny that there is such a thing as strategy and attribute all success to numbers and to tactics."³² After considering and rejecting several definitions of strategy and tactics, he concluded, "Jomini's definition is sufficient."³³ In Great Britain, too, a return to Jomini's definition was suggested when Sir George Aston related the method used in the "old Staff College days" to test each student's proclivity toward strategy or tactics and to enforce the definitions of the terms. Students were told, "An enemy force of all arms is massed behind Beacon Hill," a conspicuous feature visible in the distance. The officers most likely to make tactical leaders would raise their eyes to gaze at the hill while those inclined to be strategists would look to their maps for the solution to the problem.³⁴

Since the First World War, strategy has connoted the consideration not only of larger and larger military forces but of non-military considerations as well. Strategy has thus tended to move into the sphere of politicians and high-ranking civilians while tactics remained with the military commander. This tendency ran counter to some worthy definitions and historical usages, and it created a discontinuity in the exegesis of the principles of war. In 1944, the United States Army

³²William K. Naylor, Principles of Strategy with Historical Illustrations (Fort Leavenworth, Kansas, 1921), p. 12.

³³Ibid., p. 13.

³⁴George Grey Aston, War Lessons New and Old (London, 1919), p. 37.

Dictionary defined strategy as "making plans and using military forces for the purpose of gaining and keeping the advantage over the enemy in combat operations."³⁵ This definition applied to any level of command where rational judgment was used in the formulation and execution of decisions. When Jomini wrote, decisions which could result in the gaining or maintaining of an advantage over the enemy were made by only the highest ranking officers, and such decisions were generally made upon the map. The actions of regiments, battalions and companies were prescribed orderly movements. Tactics, the art of fighting, the movements in sight of the enemy or in contact with the enemy, prevailed. As skirmishing replaced the double order, the evolutions of the battlefield were removed to the parade grounds, and tactics became less definitively prescribed. Open formations replaced the closed orders, and advance by drumbeat gave way to advance at the discretion of the unit commander. Detailed planning was conducted at increasingly lower echelons of command, and the need for critical "strategical" thinking necessarily took place wherever planning was conducted. Strategy did not cease with the planning of the operations, either; it continued into the execution. A considerable advantage over the enemy could be gained by commander at all levels by executing any of a number of alternatives, by altering, for example, directions and rates of movement or by varying the amount of firepower being brought to bear. Such decisions contributed to gaining and maintaining the advantage over the enemy and hence were a part of strategy. Any conscious effort to outwit, deceive, surprise,

³⁵United States War Department, TM 20-205, Dictionary of U.S. Army Terms, 1944.

or demoralize the enemy was an attempt to gain advantage over the enemy and was a part of strategy.³⁶ According to the definition in vogue at the time, strategy existed at all levels of command in the Second World War.

The conduct of war had changed markedly since the word "strategy" was revived in the Napoleonic era. In a century and a half, the art of decision-making had extended from generals to both politicians and small-unit leaders. Tactics continued in the same period to provide order by prescribing formations and by prescribing techniques of fire and movement upon the battlefield. Soldiers, who had for centuries been involved in tactical instruction, also tried to bring order to the study of strategy. This attempt was inextricably intertwined with the development of the principles of war.

It is difficult to determine the origin of an idea with a high degree of assurance; it is more difficult to follow the development of an idea through the maze of forces that act upon it and to distinguish the influencing forces from the merely contingent forces. The search can be enlightening, and the results can, at the least, be suggestive. One of the forces that appeared in nexus with the development of the principles of war was the establishment and metamorphosis of military educational institutions, and a second force intimately connected with the first was the impact of science upon military education in particular and upon society in general.

³⁶ See J. C. O. Whitehead, "The Word Strategy," Army Quarterly, XXXIV (April 1937), 113-117. Whitehead concluded that tactics is the contest of the material forces and that strategy is the contest of the mind.

The word "law" came down trailing clouds of glory from Galileo and Newton. Students of society, consciously or unconsciously desiring to assert the scientific status of their studies, adopted the same language and believed themselves to be following the same procedure.³⁷

In the milieu of the scientific age, the Royal Military Academy at Woolwich was established for instructing "the raw and inexperienced people belonging to the Military Branch of Ordnance in the several parts of Mathematics necessary to qualify them for the service of the Artillery, and the business of Engineers."³⁸ In 1794, amidst revolution in Paris, a school for public works was established to provide a complete education for some of the public services.³⁹ The name, Ecole polytechnique, was applied in 1795, and the school became a preparatory school for the training of both civilian and military engineers. Schools of application, such as the engineer and artillery school established at Metz in 1802, completed an officer's scientific education. Great Britain's Royal Military College was founded in 1799 to educate young officers and to provide staff officers for the army, and mathematics was the chief subject taught.⁴⁰ The United States Military Academy was founded in 1802 to form ". . . the basis in regard to science, on which the establishment rests"⁴¹ A military school for officers was founded in

³⁷ E. H. Carr, What is History? (New York, 1967), p. 72.

³⁸ Great Britain, War Office, Report of the Commissioners Appointed to Consider the Best Mode of Re-Organizing the System for Training Officers for the Scientific Corps Together with an Account of Foreign and other Military Education (London, 1857), p. xli.

³⁹ Ibid., p. 6.

⁴⁰ Hugh Thomas, The Story of Sandhurst (London, 1961), p. 66.

⁴¹ Edward O. Roynton, History of West Point (New York, 1863), p. 202.

Berlin in 1810 to provide the means

. . . for acquiring the knowledge requisite for higher ranks of the service, for the duties of officers of the staff, and for all other appointments which demand military and scientific studies of a higher and more general character than the common ones.⁴²

The schools did not flourish initially, but the recognition of the need for scientific education among the officer corps of an army established a pattern that long persisted in military educational institutions.

In the era of security that followed the Napoleonic Wars, the race to establish and promote "scientific" institutions for officers was terminated largely as a result of its "low priority among domestic political issues."⁴³ But even in the existing schools, neither military history nor the study of the operations of war received much emphasis. Principles of war were rarely mentioned; principles of scientific subjects, however, continued to play a dominant role in the curricula. The model of the educated soldier was one whose thinking had been shaped by exposure to the order that science brought to earthly phenomena. Though Jomini provided the seed from which the principles of war would grow and flourish, he also warned of overly-ordered thinking in regard to the study of the art of war:

To reduce war to geometry would be to impose fetters on the genius of the greatest captains and to submit to the yoke of an exaggerated pedantry. For my part I shall ever protest against such theories, as well as against the apology of ignorance.⁴⁴

⁴²Henry Barnard, Military Schools and Courses of Instruction in the Science and Art of War (New York, 1969 [1872]), p. 284.

⁴³Brian Bond, The Victorian Army and the Staff College, 1854-1914 (London, 1972), p. 45.

⁴⁴Hittle, p. 34

In fact little attention was given to the study of war in military educational institutions until the later half of the nineteenth century.

In Great Britain at mid-century, new influences toward pedantic thinking were introduced to the profession of arms when examinations were instituted to determine qualification for commissioning, promotion and for entrance into the military schools. The use of competitive entrance examinations had been the rule for some time in France, but in Great Britain the extensive use of examinations had more pervasive effects. For example, it fostered a quaint group of military masters known as crammers and the arid knowledge that they proffered. The crammers offered no guarantee that any given examination would be passed, but their success was as widely known as their methods were pernicious to the education of the officer corps. Captain Lendy, A Sunbury crammer and military author of some repute, concentrated on the memorizing of facts; under his tutelage, "the first four books of Euclid were learnt by heart with no attempt at understanding them."⁴⁵ Winston Churchill, with typical wit, related his cramming experiences prior to his acceptance to the Royal Military College at Sandhurst:

When I failed for the second time to pass into Sandhurst, I bade farewell to Harrow and was relegated as a forlorn hope to a "crammer." . . . It was said that no one who was not a congenital idiot could avoid passing thence into the Army. The Firm had made a scientific study of the mentality of the Civil Service Commissioners. They knew with almost Papal infallibility the sort of questions which that sort of person would be bound on the average to ask on any of the selected subjects.⁴⁶

⁴⁵Bond, p. 89.

⁴⁶Winston S. Churchill, My Early Life, A Roving Commission (London, 1930), pp. 42-43.

The evils inherent in cramming did not escape official notice; the Royal Commission on the Education and Training of Officers reported in 1869, "This 'cramming process' is almost universally resorted to by those seeking admission to the two military colleges"47 Some changes were recommended by the commission, but the cramming industry continued to thrive. In support of the industry, a raft of literature was published which neatly categorized the most esoteric knowledge and provided extensive lists fit for memorizing. The problems attendant upon rote memorization of subjects which deserve attention, study and understanding also found their way into the British army and into other military educational institutions as well. Criticism of the West Point curriculum was frequently based upon its relying "mainly on the memorizing method in all that concerns the art of war."48 The success of crammers and memorization techniques suggested that a military precision was the acceptable educational standard for the professional officer.

By the late nineteenth century, it was generally agreed "that modern warfare is the offspring of science and civilization; that it has its rules and its principles, which it is necessary to master before being worthy to command."49 Science influenced society in many ways.

⁴⁷Great Britain, First Report of the Royal Commission on the Education and Training of Officers (London, 1869), p. 14.

⁴⁸Charles Crawford, "Our Backward Military Science," The Literary Digest, LV (July 1917), 30. This article is an abridgement of Crawford's article of the same title which appeared in the Infantry Journal in March 1917.

⁴⁹George W. Cullen, Biographical Register of Officers and Graduates of the United States Military Academy and Early History (3d ed.; Cambridge, Massachusetts, 1891), p. 6.

Darwin's impact was profound, and in France the extension of science into the realm of society was given emphasis by August Comte, a former student of the Ecole polytechnique, and his positivist school. There is little evidence that positivism had extensive influence outside its own ranks, but the fundamental assumption of positivism that "the phenomena of human thought and of social life are continuous with the phenomena of the inorganic and organic world of nature and therefore susceptible of investigation by analogous methods" certainly had its own analogous developments not only in the study of war, but also in other disciplines.⁵⁰

In the legal and medical professions, the idea was advanced that the basis of the discipline was scientific and that its practice was based on general a priori principles which could be determined by the methods of science.

In the legal profession the complaint was registered:

The most distinguished of our lawyers and judges are prone to regard with a species of disdain any resort in forensic argument to elementary principles, and comparatively little attention is given in our schools of law to the scientific study of the foundations of our legal institutions.⁵¹

The objection embodied in this complaint was corrected with great success by Christopher Columbus Langdell, who, as dean of the Harvard Law School, brought Harvard to the zenith of legal educational institutions. Believing that law was a science which consisted of a few, basic principles, he maintained that a mastery of these principles would allow their

⁵⁰Walter M. Simon, European Positivism in the Nineteenth Century: An Essay in Intellectual History (Ithaca, New York, 1963), pp. 94 and 4.

⁵¹James C. Carter, Law: Its Origin, Growth and Function (New York and London, 1907), p. vi.

application ". . . with constant facility and certainty to the ever-tangled skein of human affairs."⁵² He further believed,

Much the shortest and best, if not the only way of mastering the doctrine effectively is by studying the cases in which it is embodied. . . . Moreover, the number of fundamental legal doctrines is much less than is commonly supposed⁵³

President Eliot of Yale observed, "Professor Langdell's method resembled the laboratory method of teaching physical science, although he believed that the only laboratory the Law School needed was a library of printed books."⁵⁴ Langdell's method was called the case method, and his case class ". . . was to isolate and analyze the relatively few principles of the common law and illustrate where some judges had deviated from them."⁵⁵

The great intellectual theme of medical education during this same period was the "need to turn the training of medical students away from abstract lectures and back to the laboratory and the ward,"⁵⁶ This idea originated in the great scientific centers of Europe where "the realization had dawned that medicine depended upon scientific knowledge of the nature and causes of disease."⁵⁷ Johns Hopkins, founder of the university which bears his name, was influenced by the laboratory method

⁵²Robert Stevens, "Two Cheers for 1870: The American Law School," Perspectives in American History, V (1971), 435.

⁵³Ibid.

⁵⁴Ibid., p. 436. Quoted from Charles W. Eliot, A Late Harvest, p. 54.

⁵⁵Stevens, p. 437. ⁵⁶Ibid., p. 446.

⁵⁷Oscar Handlin (ed.), William Henry Welch and the Rise of Modern Medicine (Boston, 1954), pp. v-vi.

in the German schools. He believed,

Medicine involved a commitment to the process of learning by doing, as a means to the end of producing in students a generalized capacity to deal with problems scientifically; not particular problems defined--and resolved--in advance, but all problems and real problems, with the unexpectedness about them that makes life different from school.⁵⁸

Johns Hopkins built a hospital to provide the cases, and he built the school to study the cases and to derive scientific knowledge from that study.

In the late nineteenth century, military schools of application turned increasingly to military history to provide the cases from which scientific knowledge could be derived. The applicatory method fulfilled this task ideally. Heralded throughout western civilization as the most valuable method for all branches of military instruction, it was based on the premise that theoretical principles could be developed from historical cases. In the schools of application, war games, staff rides and field exercises without troops were conducted to provide greater comprehension of the principles of the art. In the more formal schools, like those at Sandhurst and West Point, military history courses provided the examples from which the enduring principles were to be derived. In support of this theory of education, a British committee on the education of officers recommended,

While the general educational background at Woolwich must necessarily be to a considerable extent on a basis of mathematics and science, we consider that the general educational background at Sandhurst might well be Military History.⁵⁹

⁵⁸ Donald H. Fleming, William Henry Welch and the Rise of Modern Medicine (Boston, 1954), p. 104.

⁵⁹ Great Britain, War Office, Report of the Committee Appointed to Consider the Education and Training of the Officers of the Army (London, 1902), p. 22.

The art of war continued to presume a scientific basis. Mathematics, which dominated the eighteenth and early nineteenth century curricula, now shared with military history its role as the tool of the scientific method. The faith expressed by believers in science was extreme:

When at length the great cycle of War breaks over us, our generals and politicians, I feel assured, will find out the danger of relying on empiricism as opposed to scientific method so vividly, that the demand for the true mathematicians will soon exceed the supply, and the men who by organized scientific method can help our generals to secure the ultimate victory, will find themselves the recipients of the empire's most substantial rewards.⁶⁰

The themes outlined above surface from time to time in the development of the principles of war, but the mainstream of development is found in the literature of war which influenced the military profession. This literature reveals that two major trends exist in the development of the principles of war. The first was the trend toward specificity of content. Jomini stated that fundamental principles exist, but relatively few of his followers provided a definitive list of these principles. The bulk of the literature on the theory of war in the nineteenth century acknowledged the existence of principles, but it was only toward the end of the century that certain of these principles were given titles which gained wide acceptance. Foch's list of principles, offered to the students of the French War College near the turn of the century, illustrated the continuation of the trend toward specificity; he lectured at length on the four principles that he had identified and included "etc." as the final word on his list. When official publications included lists of principles, no provision for additional

⁶⁰ Frederick N. Maude, The Evolution of Modern Strategy from the XVIIIth Century to the Present Time (London, 1905), p. xi.

principles was allowed. The trend toward specificity culminated in dogmatism.

The second major trend in the development of the principles of war, which began when specificity was attained, was the trend toward multiplicity in the use of the principles. The principles which began as a guide for the conduct of war became a tool for historical analysis. History was no longer the laboratory for reasoned study but the helpless and hapless victim of judgments based on model principles of another age. In addition to the new didactic uses of the principles, the existence of the principles in the doctrine of the armies of the major powers inspired the introduction of principles of war in other countries, other services and for more specialized types of military operations.

Concomitant with the proliferation of the uses of the principles of war, misinformation and myths concerning their origins have arisen. It is often overlooked, for example, that the German army has never adopted a definitive list of principles of war and that in regard to the statement of principles of war, the French army has been far less dogmatic than the generally more pragmatic British and American armies. By examining the forces and the process which led to the adoption of definitive lists of principles for the conduct of war in Great Britain and the United States, the principles themselves and their usefulness can be better understood. By examining different views of principles such as those that prevailed in France and Germany, the chameleon-like characteristic of the principles of war can be observed, and the conclusion that the principles of war are not universal truths that have been known in all times and places becomes apparent.

Chapter II

J. F. C. FULLER AND BRITISH CODIFICATION

The development of the list concept of principles of war received its greatest impetus in the nineteenth century from instructors in the blossoming military schools. Early in the century little attention was given to the study of military topics in the schools, for most of them, like the French school at Saint Cyr, the Royal Military College in Great Britain, cadet schools in Germany and the United States Military Academy, were concerned with the formative education of candidates for commissions. Mathematics was the chief subject taught, and "scientific" subjects dominated the curricula.¹ During the second half of the century, the formative schools gave increased attention to the study of military topics and notably to military history as a medium for investigating a theory of war. But the most intense quest to elicit a theory of war came from the schools established to teach the conduct of war to officers who had demonstrated potential to assume key positions in the service. In the British Staff College, The Ecole supérieure de guerre, the Kriegsakademie and the School of Application for Infantry and Cavalry at Fort Leavenworth, Kansas, instructors had

¹See Henry Barnard, Military Schools and Courses of Instruction (New York, 1872); see also Great Britain, Report of the Commissioners appointed to consider the best Mode of Reorganizing the System for training officers for the Scientific Corps together with an account of Foreign and other Military Institutions (London, 1857).

the opportunity to think about the conduct of war and the requirement to transmit their thoughts in a meaningful and comprehensive manner.

Building on the prevailing theory that maintained that the conduct of war was based upon a few, fundamental principles, instructors often identified at least the most important of these principles. Patrick MacDougall, Edward Hamley and G. F. R. Henderson spoke and wrote of principles of war while teaching at the British Staff College. Henri Bonnal and Ferdinand Foch emphasized the role of principles of war at the Ecole supérieure de guerre, and Foch provided a list of at least some of the principles of war. He stated that the theory of war is based upon the principles of economy of forces, freedom of action, the free disposition of forces, security and others.² Field Marshal Colmar von der Goltz, when an instructor at the Kriegsakademie, spoke of two "principles of modern warfare:" first, the enemy's main army is the primary objective, and second, all power must be concentrated for the decisive hour.³ And in the United States, Alfred Thayer Mahan lectured at the Naval War College that principles formed the foundations upon which the art of war was built. Instructors at the Leavenworth school echoed the words of their European counterparts. The schools provided an intellectual framework in which the principles of war could be considered and promoted, but their instructors held varying views on the nature of the principles.

²Ferdinand Foch, Des principes de la guerre, Conférences faites à l'Ecole supérieure de guerre (2d ed.; Paris and Nancy, 1906), p. 8.

³Colmar von der Goltz, Kriegführung, Kurze Lehre ihrer wichtigsten Grundsätze und Formen (Berlin, 1895), pp. 12-14.

The common, cataclysmic experience of World War I did not clarify the identity, the definition nor even the format for the presentation of principles of war. Some wartime orders and manuals claimed to present general principles for the conduct of war; others presented principles that were applicable to specific activities of war, e.g., the offensive, the defensive or position warfare. There were, however, important enduring consequences of the various views of principles that had been put forward during the war. First, the existence and efficacy of principles became widely accepted among military men, and second, many of the lists and summaries of principles that appeared during the war were officially sanctioned. Instructions and manuals containing lists of principles were used in training and in the theater of war, and they carried the seal of the respective war departments or the endorsement of commanders of high rank and position. Finally, due to their being officially sanctioned and because these publications were necessarily terse and positive, the different lists which appeared were generally brief and definitive. Only the most positive approach to the conduct of war could expect a favorable reception during the crises of 1914-1918. It was in this milieu that J. F. C. Fuller made his contribution to the modern list concept of the principles of war.

After the adoption of a brief list of principles of war in the British Field Service Regulations—Operations (Provisional) of 1920, Fuller claimed that he had been the first to identify the true principles of war and that his first list had appeared in a pamphlet, Training Soldiers for War, which he had written in 1912.⁴ Taken in context,

⁴John Frederick Charles Fuller, The Foundations of the Science of War (London, 1926), p. 14.

however, the six principles identified in the pamphlet were merely a collection assembled from other sources. Furthermore, Fuller had stated that the six were only the most important of the principles of war:

On searching for a doctrine our first task is to lay bare the principles of war, the chief of which are the principle of the Objective the principle of mass the principle of the Offensive, and the principles of Security, Surprise and Movement (i.e., rapidity).⁵

These principles were not presented as a definitive list, nor was each presented as a title with a terse explanation of its meaning. Fuller simply offered an enumeration of some of the principles that were often spoken of in the military literature of the day.

Fuller next took up the principles of war during his student days at the British Staff College, but even before his arrival he became acquainted with the pedantry that permeated many pre-war British military institutions. Fuller had failed in his first attempt to gain admission to the Staff College, but he succeeded in 1913—perhaps because he recognized that in the British army ". . . success does not so much depend upon what you know as upon what the examiner knows" ⁶ He further concluded that one should not study in order to become a staff officer.

. . . but in order to pass the examination. Abide rigidly by the manuals and regulations; do not read books that are of value, but instead crammers' productions; for the average crammer is no fool.⁷

⁵J. F. C. Fuller, Training Soldiers for War (London, 1914), pp. 41-42.

⁶J. F. C. Fuller, Memoirs of an Unconventional Soldier (London, 1936), p. 21.

⁷Ibid.

Once established at the Staff College, Fuller continued to express his dissatisfaction with British military institutions, and he also maintained the concept of principles which was evident in Training Soldiers for War, i.e., he believed that the principles of war should be few in number and that they could be expressed as aphorisms. In his last essay written at the college before war interrupted the course, he compared the battles of Salamanca and Chancellorsville in the light of the principles cited in his pamphlet. His essay began by noting that the Field Service Regulations of 1909 stated, "The principles of war are neither very numerous nor in themselves very abstruse . . .," and he complained that not one principle was mentioned. In fact, many were, but Fuller's conception of principles differed from the view expressed in the regulations, which held that the principles were general truths associated with each of the many activities of war. He further believed that the principles, as he conceived them worked like magic

. . . because they kept criticism on logical lines and supplied a skeleton to the illogicalities of war. Unfortunately they were not in the Field Service Regulations, therefore [according to his mentors] they were incorrect.⁸

When he asked what were the correct ones, he was curtly told that it was not the business of the student to amend the regulations, but to study them.⁹ In less than a decade the principles as Fuller conceived them would find expression in the Field Service Regulations, but for the moment his instructors were unwilling to admit that a student's essay would be superior to the doctrine that they were required to teach. Fuller reflected on their plight:

⁸Fuller, Memoirs, p. 28. ⁹Ibid.

They were just parts of a machine created to produce standardized thinking, and to think in a standardized way is a great relief to an instructor, for otherwise he might be caught out.¹⁰

Fuller had the courage to be inquisitive and to differ from standardized and conventional responses, but his thinking was not so far afield that he could be dismissed as a charlatan.

For the British army, 1914 and 1915 were years of disappointment, and Fuller used his conception of the principles of war to explain the causes. He admitted that he thought about war on a higher level than his duties warranted, but his efforts were rewarded when his article, "The Principles of War with Reference to the Campaigns of 1914-15," was published, though anonymously, in the Journal of the Royal United Service Institution. When Fuller appraised his contribution to the list of eight principles of war adopted in 1920 by the War Department, his recollection of the details of this article was again misleading, as his memory had been faulty in recalling his mention of principles of war in Training Soldiers for War. Concerning the journal article, he wrote in 1925, "This article was published in February 1916, and to the former six principles, I added two new ones--the principle of economy of force and the principle of co-operation."¹¹ The two "new" principles were certainly not new, but his statement was wrong for another reason as well. His article did not discuss just the eight principles that were adopted with minor changes in the post-war Field Service Regulations, but eleven principles of war. The eight principles recalled by Fuller were included in the first part of the

¹⁰Ibid., pp. 28-29.

¹¹Fuller, Foundations, p. 14.

article, "Strategical principles." These were: the objective, offensive, mass, economy of force, movement, surprise, security and co-operation. Part two of the article was entitled, "Tactical principles," and three such principles were identified: demoralization, endurance and shock.¹² War-time literature and pre-war literature often referred to principles in either the tactical or strategical branches of war, and Fuller similarly enumerated principles in both areas. Thus, he did not present a list of the principles of war in his 1916 article, but rather one list of strategical principles and another of tactical ones. He stated that the latter list included the eight strategical principles, but it remained a list of the principles of tactics and not of war. He also recognized that some semantic difficulties existed with the terms "strategy" and "tactics," but attributed ". . . all of these misunderstandings . . . not only to faulty use of words, but to cabalistic definitions studiously inculcated by army crammers and such-like illuminati"¹³ and did little to clarify distinctions between the two. Fuller further confused the proper sphere of the principles that he presented by stating that the eight strategical principles were the "leading ones in the science of war," and that the whole art of war was centered about the three tactical principles.¹⁴

In addition to his article, Fuller promoted his conception of the nature of the principles of war through a series of commanding

¹² J. F. C. Fuller, "The Principles of War with Reference to the Campaigns of 1914-15," Journal of the Royal United Service Institution, LXI (February, 1916), 3 and 18.

¹³ Ibid., p. 17. ¹⁴ Ibid., pp. 3 and 18.

officers' conferences that he was tasked to head.¹⁵ Each course consisted of seven days of instruction in France, and was repeated five times with twenty to thirty senior officers attending each weekly session. Fuller lectured twice a day but in his memoirs was able to recall only three lectures that he had given at the school; the opening lecture had been an "Address on the Principles of War."

Fuller's proclivity to get to the heart of every topic and to lay bare its essentials was apparent in another article written during the war and entitled, "The Principles of Defense as Applied to Trench Warfare." It was not published, perhaps because, as Fuller explained, ". . . it was considered that it might be of value to the enemy; consequently, I presume, the logic was that it could be of no earthly value to ourselves."¹⁶ Another of his papers, "Plan 1919," did receive considerable exposure, for it was circulated among such senior British officials as Sir Henry Wilson, Chief of the Imperial General Staff, and Winston Churchill, then Secretary of War. In this paper, Fuller mentioned only one of his principles. He wrote,

Irrespective of the arm employed, the principles of strategy remain immutable, changes in weapons affecting their application only. The first of all strategical principles is "the principle of the object," the object being "the destruction of the enemy's fighting strength."¹⁷

The exposure of British soldiers and politicians to Fuller's ideas on the principles of war certainly had an impact upon British military thought, but even when the war ended, Fuller did not think of principles as a single list that purported to hold all the truths necessary for

¹⁵Fuller, Memoirs, see pp. 56ff. ¹⁶Ibid., p. 62.

¹⁷Ibid., p. 324

the proper conduct of war. He believed that there were a few, fundamental principles for the various operational branches of war, that these principles could be expressed briefly and that they could be identified by short titles. This concept of principles was evident in his widely-read journal article, in his lecture at the commanding officers' course, and in his papers, "The Principles of Defence as Applied to Trench Warfare" and "Plan 1919." He sought to identify the essential, and he accepted the efficacy of principles in the conduct of war:

. . . I believe that we, in common with all other nations, have erred by abandoning the rock of principle for the shifting sands of chance. If this be true, let us cease to stop our ears to the oracle of history, instead, let us follow in the footsteps of the great masters of war whose successes are directly attributable to the maintenance of these principles.¹⁸

But a single list that could claim to be the true and complete enumeration of principles of war still had not been formulated. That task fell to the group of officers charged with the rewriting of the Field Service Regulations for the post-war army.

The tendency to enumerate and encapsulate principles for the conduct of war entered its most important and consequential phase late in 1919. At that time a committee of British officers under the direction of Colonel J. G. Dill was at work on the revision of the Field Service Regulations. Dill had been a classmate of Fuller at the Staff College and was certainly aware of Fuller's writings on the principles of war. Other officers on the committee had probably become acquainted with Fuller's ideas on the principles either through the article in the

¹⁸ Fuller, "Campaigns of 1914-15," p. 40.

Journal of the Royal United Service Institution, the officer's courses conducted by Fuller in France, or through the course of instruction at the Commanding Officer's School established at Aldershot after the war where Fuller's 1916 article was used extensively. Nevertheless, Fuller credited himself with bringing the idea of the brief list of principles for the conduct of war to the attention of the committee. He wrote in his memoirs:

The question began on November 19, 1919 when I was a member of a committee assembled to revise the Staff College Entrance Examination. At the time I pointed out that in the F.S.R. of that date a mention was made that "The fundamental principles of war are neither very numerous nor in themselves very abstruse," and then no single principle was defined. Thereupon the C.I.G.S. decided that definition was necessary¹⁹

The committee working on the revision of the Field Service Regulations set out to define the principles, and a draft of the proposed regulations was sent to the Staff College and to other agencies for comment. Fuller, now assigned as an instructor at the Staff College, was appalled when he read in the draft manual that two principles of war had been identified: "Infantry never relinquishes captured ground," and "Infantry is never exhausted."²⁰ His astonishment at these pronouncements was apparently shared by others who read the early draft, for on April 6th, 1920, he received a letter from a committee member which began, "We have finished our labours on the first chapter of F.S.R., Vol. II, which begins with your principles of war."²¹ Here, for the first time, an official publication had identified a terse list of

¹⁹ Fuller, Memoirs, p. 388.

²⁰ Ibid.

²¹ Ibid.

"principles of war." They were introduced by the simple sentence, "The principles of war may be summarized as follows."²² Eight sections, each headed by a bold-faced word or phrase, concluded the section of the chapter entitled, "The Principles of War." The "bold-faced" principles read:

- (i.) Maintenance of the objective.--
- (ii.) Offensive action.--
- (iii.) Surprise.--
- (iv.) Concentration.--
- (v.) Economy of force.--
- (vi.) Security.--
- (vii.) Mobility.--
- (viii.) Co-operation.--

With only minor differences, this list of eight principles corresponded to the eight principles of strategy that Fuller had identified in the journal article of 1916. But the 1920 Field Service Regulations did not claim that its principles were applicable to strategy or to tactics; they were rather true "principles of war" or as they were referred to later in the manual, "principles applicable to the leading of troops." (See Appendix 1 for the explanations of each of the eight principles.) The meaning of the word "principle," as used in the regulations however, was shrouded in some doubt, for in explaining the application of the principles, the regulations read, "No two situations are identical, and therefore, the application of the principles cannot be made subject to rules."²³ The regulations continued by discussing the importance of judgment and the usefulness of genius in the leading of troops, but by

²²Great Britain, War Office, Field Service Regulations, Volume II, Operations (Provisional) (London, 1920), p. 14. Hereafter cited as Great Britain, FSR [year].

²³Great Britain, FSR 1920, p. 15.

listing the principles, pedants and parrots were given the material necessary to ply their trades. And in fact the principles in their new definitive guise were widely accepted--by teachers, writers, theorists and professional soldiers both in Great Britain and abroad. The enthusiasm of the proponents was characterized in the letter that informed Fuller of the appearance of the eight-item list in the Field Service Regulations.

. . . what really matters is that they are in our Bible, and for that the whole Army should thank you, for I am convinced of the paramount importance of having them laid down in black and white as the "acid test" of our field training in peace and our operations in war. There is now no excuse for not knowing these principles, and therefore there is far less excuse, if any, for breaking them, with resultant failure.²⁴

The claim of sanctity and usefulness of a brief list of principles for use in war was not confined to the Field Service Regulations--Operations. In October 1920 Fuller published an article that identified eight principles, not of strategy nor of tactics, but of war. He claimed that they were "eternal, universal and fundamental," and that they were applicable to "every scientifically fought boxing match" and to every battle.²⁵ In content they did not differ from the eight principles enunciated in the Field Service Regulations. The official position was coming to be more generally accepted. For instance, in 1922 an article appeared that sought to confirm Fuller's pronouncement that the principles were eternal. The article investigated the applicability of the principles at the battle of Kadesh, which occurred in 1288 B.C. The

²⁴Fuller, Memoirs, p. 389.

²⁵J. F. C. Fuller, "The Foundations of the Science of War," Army Quarterly, I (October 1920), 90.

article concluded, "Viewing the campaign as a whole, it will surely be agreed that it goes far to substantiate the dictum that 'The principles of war are eternal.'" ²⁶

In 1923 Volume I, Organization and Administration, of the Field Service Regulations followed the lead of Volume II, Operations, by enumerating five "general principles of war organization." (See Appendix 2.) The appearance of this list again demonstrated the propensity to enumerate and encapsulate the essence of complex subjects to facilitate the study and understanding of war.

After the adoption of the official list of principles of war, Fuller wrote of the existence of eight principles of war in his book, The Reformation of War; but in The Foundations of the Science of War, published in 1926, he argued that there were nine principles. "Economy of force" was elevated to the position of the governing law of war, and the nine other principles were: direction, concentration, distribution, determination, surprise, endurance, mobility, offensive action and security. ²⁷ The principles of maintenance of the objective and cooperation that had appeared in the Field Service Regulations were absent from this work, and the principles of direction, distribution and determination appeared for the first time. In The Foundations of the Science of War, Fuller attempted to establish the "scientific" basis of the principles, but even though one reviewer favorably compared the work to Clausewitz' On War, most commentators shared the opinion that its

²⁶ A. H. Burne, "The Battle of Kadesh and the Principles of War," Army Quarterly, IV (April 1922), 123.

²⁷ Fuller, Foundations, p. 221.

great danger was that "the young should take it seriously."²⁸ The book intensified and polarized the growing debate over the dictum that a few, fundamental and immutable principles, which can be simply and definitively stated, regulate the conduct of war.

The principles enunciated in the provisional Field Service Regulations of 1920 reappeared in the edition of 1924, but in the edition of 1929, the list was rearranged and shortened to seven by dropping the former first principle, "Maintenance of the objective." Many British writers used the principles of war as an analytical tool to dissect battles of the past, and others used the principles to discuss the proper conduct of war. Some suggested additions to the official list, others deletion, but in the early 1930s British military literature reflected "a growing reluctance to submit to a fixed set of principles."²⁹ Sir Frederick Maurice, for example, wrote,

The general conclusion . . . is that there are no fixed laws and rules of the art of war, and that even its principles are fluid and require constant reexamination in the light of changes which time brings.³⁰

The "entire elimination of those jewels 'three words long' which . . . masquerade as 'Principles of War'"³¹ was eventually called for, and in

²⁸From the Civil and Military Gazette as quoted in "The Value and Originality of 'The Foundations of the Science of War,'" Army Quarterly, XII (July 1926), 358 and Quarterly Review of Literature (April 1926), 165.

²⁹Phormio, "Economy of Forces: A Plea for the Older Meaning," Journal of the Royal United Service Institution, LXXV (August 1930), 492.

³⁰Frederick Maurice, British Strategy: A Study of the Application of the Principles of War (London, 1929), p. 47.

³¹F. E. Winton, "Economy of Forces, Letter to the Editor," Journal of the Royal United Service Institution, LXXV (November 1930), 835.

the 1935 edition of the Field Service Regulations, Volume II, Operations, only allusions were made to the formerly hallowed principles. In the chapter on the command and control of troops in battle, the ideas behind the former principles were spread throughout the narrative. Some of the old names were italicized: surprise, mobility, concentration, security, co-operation and offensive, but the term "principle" was totally avoided.

Fuller's influence on British doctrine had waned. Possibly his resignation, prompted by his refusal to accept an assignment in India, and flirtation with fascism were factors; but primarily the demise of the principles was caused by objections to the idea that the principles could be so definitively stated.

Ironically, a definitive list of principles of war again gained official sanction in Great Britain after the Second World War. The driving force behind this reappearance was Field Marshal Bernard Montgomery. Upon his appointment as Chief of the Imperial General Staff, he called together senior service commanders and chiefs of staff of dominion armies to tackle "essential and urgent" matters. He wrote in his memoirs:

The first thing was obviously to get inter-Service agreement to the fundamental principles of war, and I drafted out these principles as I saw them, and got them agreed to by the First Sea Lord and the Chief of the Air Staff.³²

Montgomery's list included ten principles; the principle of administration was the most significant addition to the earlier lists. These ten principles have remained a part of British doctrine to the present day. Canada, New Zealand and Australia followed Montgomery's lead.

³²Bernard Montgomery, The Memoirs of Field-Marshal the Viscount Montgomery of Alamein, K.G. (Cleveland, 1958), p. 374.

The British adopted the first official list of principles of war in 1920. Its appearance intensified the debate in other western nations on the existence, nature, efficacy and concept of principles of war that began in the Napoleonic era. Montgomery's list similarly had its impact on the statement of principles of war in other nations, but only by examining the concepts concerning the principles and the institutional and individual forces at work in other nations can the development of their modern principles be fully understood. The British provided the models; they were on occasion emulated but at other times rejected by the military services of other nations.

Chapter III

POST-WAR PRINCIPLES BEYOND GREAT BRITAIN

Before the First World War, Britain had produced no military theorist of note. . . . In the twenty year following, European military thought was dominated by Englishmen. It is unrewarding to speculate why this should have been. Perhaps it was that no other country saw the rise of the quality of Liddell Hart or J.F.C. Fuller; perhaps none offered its readers an audience.

Not that Britain lent to either of its literary strategists a very ready ear; indeed both were read more widely abroad than at home and often in pirated editions.¹

Even though Fuller and Basil H. Liddell Hart were widely read on the Continent, their concept of principles was not accepted by the authors of French and German doctrine. Liddell Hart, primarily remembered as a historian and strategic critic, himself never endorsed the British list of eight principles of war, but he nevertheless contributed to the spread of the belief that an enumerable list of principles can be of benefit to the military commander. As early as 1919, he presented a list of principles which he called the "ten commandments" of the combat unit (Appendix B). He wrote,

. . . it is suggested that if one can thoroughly imbue the commander of the Combat Unit, his section leaders and men, with these essential principles . . . a great advance will be made in the general efficiency of the infantry arm²

¹ John Keegan, "The Inter-war Years," A Guide to the Sources of British Military History, ed. Robin Higham (Berkeley, 1971), p. 461.

² Basil H. Liddell Hart, "The 'Ten Commandments' of the Combat Unit, Suggestions on its Theory and Training," Journal of the Royal United Service Institution, LXIV (May 1919), 292.

He later affirmed the existence of a few "general truths"—which he claimed differed from abstract principles—in his strategical writings; he first listed the "truths" in 1932 in his work, The British Way in Warfare: Adaptability and Mobility. He presented eight "axioms expressed as maxims" which were determined by examining the actions of a boxer and then likening the boxer's tasks to those of a commander in war (Appendix 4). Though his works undoubtedly influenced German military thought in the inter-war years, his concept of principles or axioms or maxims or truths remained foreign to German military doctrine. Nor is there evidence to suggest that his thought had any greater impact on French conceptions of principles.

Fuller's writings were even more widely discussed on the Continent than Liddell Hart's, but even his insistence upon the efficacy of a list of principles of war failed to influence German doctrine. He did, however, contribute to the debate concerning the existence of principles of war that was carried on in French military circles. In fact at the conclusion of World War I, there had been some indications to suggest that a short list of principles of war would soon appear in French doctrine. Foch, who as supreme commander of the allied forces had considerable influence within the French general staff, wrote in the preface to the 1918 republication of Des principes de la guerre, ". . . the fundamental truths which govern this art remain immutable. . . . It is therefore still necessary to establish the principles of war."³ Foch's quick departure from power, brought about largely because of his differences with Clemenceau

³As translated and quoted in Sir Frederick Maurice, British Strategy: A Study of the Application of the Principles of War (London, 1929), p. 3.

on acceptable peace terms, severely limited his influence in the post-war army. His belief that war was governed by a few basic principles nevertheless persisted and was repeated by a number of French writers. In 1919 Lieutenant-colonel Eugène Cholet, in his A propos de doctrine, les leçons du passé confirmées par celles de la grande guerre, concluded:

- 1st. That fundamental principles of war certainly exist.
- 2d. That they appear to be very few in number.
- 3d. That they are immutable and have guided the actions of all the great leaders of war⁴

No listing of the principles appeared in this work, but two years later, Fuller's article, "The Foundations of the Science of War," which presented eight principles of war, was translated into French and issued to all units of the French army. General Buat, chief of the French general staff, had ordered the translation; he declared that the article contained "an exact vision of the future."⁵ That the conditions that would lead to the adoption of a list of principles of war in French military doctrine were present in France in the early 1920s cannot be denied, but when a board of distinguished officers headed by Marshal Pétain convened to formulate new regulations for the training and operations in war of large units, the enumeration of fundamental principles was completely and explicitly rejected. The views of the board were expressed in the opening section of the regulation:

The commission has decided that the attempt to formulate principles capable of encompassing profoundly different situations is

⁴Eugène Cholet, A propos de doctrine: les leçons du passé confirmées par celles de la grande guerre (Paris, 1919), p. 40.

⁵"The Value and Originality of 'The Foundations of the Science of War,'" Army Quarterly, XII (July 1926), 357.

useless; it felt that the search would lead only to vague formulae, far removed from reality.⁶

Even though Fuller's concept of principles appealed to some French analysts in the 1920s and even though one of his articles on the principles was widely distributed in France, his principles--or indeed the concept of principles as such--was not adopted in French regulations until shortly before the outbreak of the Second World War.

Where in Great Britain the debate over the existence of enumerable principles was spurred by their elevation to doctrine, in France the debate proceeded in spite of the rejection of principles as doctrine. In 1922 a journal article concluded that von Kluck's application of proper principles led to his defeat in 1914 and that Foch's disregard of principles in 1918 led to victory.⁷ By contrast, Major H. François argued on behalf of principles of war. He believed that since rules, laws, principles or precepts existed in all areas of human activity, "It would be strange if war, the most violent expression of human activity, was an exception in this regard."⁸ He concluded,

Principles of war exist; among the most important one can cite surprise, security, economy of forces, unity of purpose, superiority of the offensive, attack from strength or weakness, communications, destruction of the enemy forces⁹

Another article, however, concluded that at least one of these principles, economy of forces, was not only operable during the greatest part of

⁶France. Ministère de la guerre, Instruction provisoire du octobre 1921 sur l'emploi tactique des grandes unités (Paris, 1930), p. 14.

⁷Henri Michel, "Pour l'enseignement de l'organisation à l'école supérieure de guerre," Revue militaire française, III (1922), 210.

⁸H. François, "Des principes de guerre," Revue militaire française, III (April 1922), 104.

⁹Ibid., 109.

the war, but that it was "only a procedure and not a principle."¹⁰ Books on the theory of war similarly took sides in the question of whether a few, basic principles regulated the conduct of war. General Serrigny wrote in Reflexions sur la guerre:

One is struck by the small number of principles which together regulate war: selection of an objective in accordance with the means, economy of forces, flanking action, rational employment of space and time, concentration, and successive decentralization of means. That is all!¹¹

In 1924 another French theoretical work spoke of principles "which do not assure victory . . . , but which if they are neglected considerably enhance the chances of defeat."¹² The principles were not listed but many were identified, e.g., economy, unity, direction, security and liberty of action. Each was discussed in turn. Other works, however, were as clear in their rejection of the concept of principles. Emile Mayer argued in La théorie de la guerre et l'étude de l'art militaire against the idea that while the methods of the military art vary incessantly, the principles remain immutable. In L'age des casernes, Colonel Dupuis claimed that the principles are not immutable, and do not exist. Both of these works were challenged in an article entitled, "Hérésies stratégiques" which came to the defense of principles and to the defense of Jomini. Jomini's association with the principles on this occasion was doubly understandable, for the author of this article, H. Lecomte,

¹⁰ L. Merat, "Un principe--un procédé: Economie des forces, concentration sur le théâtre principal," Revue militaire générale (March 1922), 197.

¹¹ Bernard Serrigny, Reflexions sur l'art de la guerre (2d ed.; Paris, 1921), p. 201.

¹² F. Culmann, Stratégie, La manoeuvre stratégique offensive dans la guerre de mouvements (Paris, 1924), p. 21.

was the son of Ferdinand Lecomte, Jomini's compatriot, disciple and first biographer. The younger Lecomte wrote,

Jomini never tried to reduce war to formulae. He simply took from the comparative study of the campaigns of Frederick and Napoleon a few proper principles which would not assure victory, but would make it more probable.¹³

The debate concerning the existence of principles of war in the 1920s involved another military writer, one whose name would become well-known in future decades. Charles de Gaulle indicated in his early writings that within prescribed limits, he too, accepted the existence of principles in warfare. In 1925 he wrote:

The principles which govern the employment of methods: economy of forces, the necessity of proceeding by concentration . . . ; surprise for the enemy; security for ourselves, only have value when they are adapted to circumstances.¹⁴

When his Le fil de l'épée, a plea for changes to prevalent French military thought and methods, appeared in 1932, it contained the same advice.

The debate over the existence of principles was nearly as intense in France as it was in Great Britain, but instead of adopting a list of principles after World War I and then rejecting it in the 1930s as a result of the debate, French doctrine rejected the idea of principles in 1921 and then included principles in the revision of the instructions for the employment of large units in 1936. The reasons for accepting the principles were stated as follows:

¹³H. Lecomte, "Hérésies stratégiques," Revue militaire suisse, IX (September 1923), 386.

¹⁴Charles de Gualle, "Doctrine a priori ou doctrine des circonstances?" Revue militaire française, XV (1925), 306.

The remoteness from war, the regular increases in the cadres of the army, and the adoption of new methods have induced the high command to ask the Commission to present an outline of offensive and defensive battle, a sort of collection of general principles for the leading of large units and for the combined use of all arms.¹⁵

Some "general principles" were included in the chapter on battle, but they were not presented as a definitive list. Elsewhere in the work, however, "directing principles" appeared, which ". . . because of their general character and permanence," the regulation claimed, "are at the base of all the operations of war."¹⁶ The next paragraph began, "These principles are the following," but the precise identity of the principles was not apparent. Three phrases appeared in bold-faced type: "impose your will upon the enemy," "maintain liberty of action" and "strict economy [of forces]," but in the following paragraph, which was also a part of the section on directing principles and which began, "Success in war is obtained by:," italics were used for the words "surprise" and "anticipation of distant events." All five of these items were preceded by a long dash and all five have been interpreted as the "principles of commanders."¹⁷ Whether the list included five items or just three remains uncertain, but that a list, albeit a less definitive list than the British, appeared in French regulations demonstrated that the proclivity to enunciate and encapsulate the essence of the proper conduct of war into a few regulating principles occurred not only in Great Britain but also in France in the inter-war period.

¹⁵ France. Ministère de la guerre, Instruction sur l'emploi tactique des grandes unités (Paris, 1936), p. 21.

¹⁶ Ibid., p. 32.

¹⁷ See Eugène Carrias, La pensée militaire française ([Paris, 1960]), p. 332.

Lists of principles or laws of war have appeared in French doctrine in various guises since World War II. In lectures at the Ecole supérieure de guerre in the mid-1950s, six "fundamental laws of war and of strategy" were presented. They were listed and titled:

- The law of movement
- The law of force
- The law of the offensive
- The law of protection
- The law of friction
- The law of the unforeseen.¹⁸

Six "fundamental laws of war and of tactics" also appeared. These were identical to the laws of war and strategy except that "shock" and "fire" replaced the laws of the offensive and of force. A decade later, the school published "Notes relative à La tactique" in which the principles of concentration of effort and of freedom of action were discussed in detail. The discussion concluded that all the art of war consisted of establishing the proper balance between these two opposing principles, and the balance was referred to as "economy of forces." In Instruction générale sur les forces terrestres, published in 1973, three principles and five rules which "have a permanent character" were presented. The introduction to these principles and rules stated, "The principles constitute the fundamental laws of tactics; the rules which are derived from them define the proper behavior or attitudes to guarantee success."¹⁹ The principles were entitled, "Concentration of efforts," "Freedom of action," and

¹⁸France. Ecole supérieure de guerre, Recueil des conférences, Problèmes opérationnels et logistiques (n.p., 1955), p. 10.

¹⁹France. Ministère des Armées, Instruction générale sur les forces terrestres, 27 septembre 1973, p. 12.

"Economy of forces," and the rules were called, "the Initiative," "Surprise," "Aggressiveness," "Continuity of action," and "Simplicity and flexibility."²⁰ These two brief lists comprised the most definitive expression of principles and rules that have appeared in French doctrine to date, and they bore striking resemblances to Jomini's thoughts on the theory of war. Jomini had written in 1806 that a few fundamental principles govern the conduct of war and that the first of these principles was "to operate with the greatest part of one's forces in a combined effort on the decisive point,"²¹ or in the shortened form characteristic of the twentieth century, "Concentration of efforts." From the fundamental principle, Jomini derived supporting maxims, the total number of which varied in the succession of publications that discussed them, but generally, about ten or twelve were enumerated. Most of the ideas contained in the five rules of the Instruction générale had appeared in these enumerations. In 1849 Jomini wrote that possibly only three or four principles existed.²² He never definitively enumerated them, but a century and a half later, an official French publication listed three principles of war. The principles also recalled the teachings of Henri Bonnal and Foch in the early years of the French war college. They held that the commander's mental attitudes and behavior were the critical components of success in war, and two of the 1973 principles, "Freedom of action," and "Economy of forces," were identical to principles

²⁰Ibid.

²¹Antoine-Henri Jomini, "L'art de la guerre," Pallas: Eine Zeitschrift für Staats- und Kriegs-Kunst, I (1808), 32.

²²Antoine-Henri Jomini, The Art of War, trans. G. H. Mendell and W. P. Craighill (New York, 1862), p. 360.

that Foch had lectured on in the 1890s. Little evidence exists to support a claim that the French enunciation of principles of war resulted from either the British list or from the influence of British writers. Rather the first definitive list of principles announced in French doctrine appeared to be derived largely from earlier and peculiarly French institutions.

A definitive list of aphorisms known as the principles of war never became a part of German military doctrine. Even though writers like von der Goltz had identified specific principles before World War I and even though German wartime orders often included terse lists of principles on sundry operational subjects, official doctrine in the immediate post-World War I period denied the existence of general principles of war. On some occasions, however, the concept of principles did appear in post-war military literature. General Friedrich von Bernhardi, who had written Vom heutigen Kriege before the war, wrote a sequel to the work in 1920. The former volume pointed out that the great fundamental laws of war remained the same in all times, and in the introduction to the latter volume, Bernhardi presented "great fundamental and vital principles which mean success in war."²³ They appeared as a series of phrases:

. . . retaining the initiative; using the offensive as the decisive form of action; concentration of force at the decisive point; the superiority of the moral factor to purely material resources; the proper relation between attack and defence; the will to victory; the unconditional dependence of policy on the requirements and results of strategy or military effort.²⁴

²³ Friedrich von Bernhardi, The War of the Future in the Light of the Lessons of the World War, trans. F. A. Holt (2d ed.; London, n.d.), p. 19.

²⁴ Ibid.

His works were well received, but his enunciation of definitive principles had little impact on those responsible for the writing of German doctrine.

In spite of Bernhardt and in spite of the familiarity of German military men with the works of Fuller and Liddell Hart, the decimated German military force allowed by the Treaty of Versailles did not try to emulate the victors in their statement of principles. When the German field service regulations were revised as the Truppenführung in 1923, its authors recalled the advice of the elder Moltke and an era of German glory. Moltke was quoted in the forward: "In war, that which is demanded by each concrete case must be done, without binding oneself to unchanging general rules."²⁵ This idea dominated German military thought, but at the University of Freiburg in the 1930s, Gerhard Ritter, a historian with close contacts to the General Staff, stated in a lecture,

Napoleon's strategy . . . can be outlined by mentioning a few, simple principles. First, the resolute concentration of all available force on the decisive point. . . . Second, a determined advance on the center of enemy power. . . . Third, on the day of battle itself, concentration of the attack against the key sector of the enemy's position. . . . Fourth, immediately after the decision, ruthless pursuit of the enemy until horse and man drop.²⁶

Ritter's enunciation of principles probably had little influence beyond the academic atmosphere of Freiburg. However, the edition of the Truppenführung which appeared in the late 1930s contained a section of general principles for marches, and each of the sections on the encounter

²⁵ Friedrich von Cochenhausen, Die Truppenführung: Ein Handbuch für den Truppenführer und seine Gehilfen (Berlin, 1923), forward.

²⁶ Gerhard Ritter, Frederick the Great, A Historical Profile, trans. and edited by Peter Paret (Berkeley, 1968), p. 131.

battle, the offensive against positions, the defensive, the pursuit and the breaking of contact and withdrawal began with brief paragraphs of "Leadership principles." Among the leadership principles for the encounter battle, for example, were four paragraphs, each introduced by a brief, emphasized phrase. The first read, "Surprise of the enemy" and the fourth was reminiscent of Jomini's fundamental principle: "Early recognition of the enemy's weak point and the formation of a strong point opposite him."²⁷ Jomini's principle was also recalled in 1940 in Colonel Hermann Foertsch's Kriegskunst heute und morgen:

In describing the general nature of attack and defense it was stated to be a fundamental principle of strategy that there must be superiority of forces, not only absolutely but also at the decisive point. . . .²⁸

Foertsch continued by stating that a "second fundamental principle requires surprise," but like the German doctrine he presented no brief and encompassing list of principles of war.

In the post World War II era, the German army continued to reject the elucidation of a single brief list of principles of war. "Principles," however, which might guide the commander and which neither claimed to be definitive nor immutable were discussed in official publications. For example, in a section entitled "Basic operational principles" (Führungsgrundsätze) in the Truppenführung of 1962, the first paragraph stated that since the leading of troops is an art, its doctrines can never be completely described and that there are no formulas for the

²⁷ von Cochenhausen, Die Truppenführung . . . (Berlin, 1935), pp. 176-177.

²⁸ Hermann Foertsch, The Art of Modern Warfare, trans. Theodore W. Knauth (New York, 1940), p. 31.

battlefield.²⁹ The paragraph continued by stating, "Every commander, however, must be guided by clear principles."³⁰ The next twenty-two paragraphs contained the "principles" that were applicable in both nuclear and non-nuclear wars, and thirteen further paragraphs addressed the "principles" applicable either exclusively to nuclear or exclusively to non-nuclear war. Key words were emphasized in these pithy paragraphs so that each paragraph or "principle" could conceivably be referred to by a title or name. The "principle," "Great success is based on bold risks" therefore could become the "principle of risk," and likewise "Every action must have a defined objective" might be the "principle of the objective."³¹ Many of the emphasized words were identical to the titles of principles identified in the doctrine of other nations: freedom of action, mobility, speed and simplicity, but significantly, the German doctrine neither referred to the principles by title alone nor attempted to summarize the most important principles in a brief list. Pragmatism and judgment applied to individual cases remained a fundamental tenet in German military thought--even in the light of their victors' adoption of terse and immutable principles of war.

Although it has been alleged that Fuller and Liddell Hart were more widely read abroad than in Great Britain, the impact of their concepts concerning the principles of war was negligible in France and Germany. In the United States, however, Fuller's early statements about principles in warfare significantly influenced the adoption of the first list to appear in U.S. doctrine. As in England, responsibility for the

²⁹ Ibid.

³⁰ Ibid.

³¹ Ibid., p. 31.

adopted list can be traced to a single individual, and also as in England, the individual was only a part of the formalization process. Unlike the British writers, however, the American did not provide the material to be incorporated in the list; he merely introduced Fuller's ideas to the proper milieu. This man, Hjalmar Erickson, brought Fuller's terse list to the American army, but the acceptance of principles in warfare, the identification of specific principles and even lists for various activities of war were already a part of the American military experience.

In the United States the trend toward the codification of general principles related to the operations of war was apparent not only in pre-war field service regulations and in wartime handbooks and instructions, but in publications that appeared after the war as well. In the Infantry Drill Regulations (Provisional) of 1919, a list of twelve "general principles" was included in the section on offensive combat (Appendix 5). In 1921, Colonel William K. Naylor, an instructor at the General Service School, Fort Leavenworth, suggested that there were two principles of strategy:

Make the hostile army the objective.

To have, if possible, all the forces assembled at the hour of decisive action.³²

Their enunciation at this time at Leavenworth hardly had the impact of novelty, however, for Fuller's list of eight principles of strategy, which had appeared in his article of February 1916, had already been presented from the platform of the Army's highest military school.

³²William K. Naylor, The Principles of Strategy with Historical Illustrations (Fort Leavenworth, 1921), pp. 49 and 53.

The Army War College had been founded in 1902 during Elihu Root's tenure as Secretary of War. Though the purpose of the school was to "train officers to command in war," the students were more heavily involved with general staff functions than with training.³³ The school closed as an academic institution when the United States declared war on Germany on 6 April 1917 and reopened in 1919 as the General Staff College, a name used until August 1921 when the former name was restored. The General Staff College was to be a true training school rather than a part of the General Staff as the earlier War College had been, but the students continued to work closely with the various divisions of the War Department.³⁴ Many War Department plans and proposals either originated at the college or were sent to the college for action and completion. This was the institutional environment that Major Hjalmar Erickson encountered upon his reporting for duty as an instructor at the college on 24 July 1919.³⁵

Hjalmar Erickson had many experiences that could have exposed him to the concept of principles in warfare, but his experiences were neither unusual nor particularly influential until his assignment as an instructor at the college. Born in Norway, he entered the service of the United States Cavalry at the age of nineteen. He was commissioned from the ranks during the Spanish-American War, graduated from the

³³ George S. Pappas, Prudens Futuri, The US Army War College, 1901-1967 (Carlisle Barracks, Pennsylvania, 1967), p. 21.

³⁴ US War Department, Annual Reports 1920, I, 140.

³⁵ The discussion of Hjalmar Erickson's career is based on information contained in the Army Register, in the Army War College cross-reference file, Carlisle Barracks, Pennsylvania, and in an obituary, Nevada State Journal, 3 March 1949.

Infantry-Cavalry school at Fort Leavenworth in 1904 and served in France as an infantryman and logistician during World War I. He was awarded the Distinguished Service Medal and recommended for promotion to brigadier general by the American commander, General Pershing. In June 1919 Erickson was invited to instruct at the General Staff College located at Washington Barracks in the District of Columbia. He accepted the invitation and was assigned to teach a part of the Training Course, a course which was closely integrated with the work of the War Plans Division of the General Staff. During Erickson's first months at the college, he traveled extensively to study the courses, materials, methods and problems of instruction at other U.S. Army schools: the Infantry School at Camp Benning, the Field Artillery School at Fort Sill, the Coastal Artillery School at Fort Monroe, the Cavalry School at Fort Riley and many others.

In April 1920 Erickson gave his first lecture at the General Staff College on the "Doctrine of War and of Training," and in this lecture he discussed eight principles of war, which he stated, ". . . could well be incorporated into our Field Service Regulations as a guide for the young officer and as an aide memoir for the older officer."³⁶ Fuller's influence was clearly revealed in Erickson's conclusion about the principles:

Through ages of actual practice on the battlefields of the World certain principles of war have been evolved. . . . When reduced to their fundamentals, these principles are few and they do not change It seems, therefore, that it should be easy to find and examine them. But our text books do not list them, so the military

³⁶Hjalmar Erickson, "The Doctrine of War and of Training," Lecture delivered at the General Staff College, 17 April 1920, p. 3.

student must search history, the reports of campaigns and the writings of military authorities for illustrations of their correct or incorrect application.³⁷

Erickson discussed each of the eight principles which Fuller had identified as principles of strategy. He did not mention that these principles were borrowed from Fuller's article, but in the revision of the lecture a year later, he stated that a complaint concerning the lack of a list of the principles of war was made ". . . in an article published in an English service journal during the early part of the World War."³⁸ But Erickson went beyond Fuller's discussion by attempting to identify the origin of some of the principles. He suggested that the "Principle of the Objective" had been, if not originated by Clausewitz, at least expostulated upon by Clausewitz. He also claimed that the "Principle of security" had been handed down by Foch and that the "Principle of co-operation" had been thoroughly demonstrated during the World War. His discussion was truly eclectic. Erickson was not alone in his call for the incorporation of a list of principles of war in U.S. doctrine in the early 1920s, for the belief that ". . . there should be a uniform and simple presentation of the principles of war, developed into a part of the officer's mental background" seemed to pervade the military educational system of the army.³⁹ Because of his position and because of the relationship that existed between the Army General Staff and the General Staff College, Erickson became the key figure in the incorporation of the concept and content of Fuller's principles into United

³⁷Ibid.

³⁸Hjalmar Erickson, "Remarks on Doctrines of War and of Training," Lecture delivered at the General Staff College, 20 April 1921, p. 3.

³⁹J. M. Scammel, "Military Education and Indoctrination," Infantry Journal, XVIII (March 1921), 257.

States doctrine.

Since Erickson taught the Training Course, which was closely involved with the work of the War Plans Division of the General Staff, it was not surprising that a training regulation published in December 1921 by the War Plans Division contained a definitive list of nine principles of war (Appendix 6). The only addition to the eight principles that Erickson had borrowed from Fuller was "the principle of simplicity." In this regulation, Training Regulation 10-5, the principles appeared as titles without further explanation of their individual meaning, but the paragraph that followed the list gave insights into their collective characteristics and applicability. The ideas in this paragraph were again unoriginal; they were borrowed from Fuller and from the 1920 British Field Service Regulations. The paragraph read:

These principles are immutable. Their application varies with the situation, the fundamentals of which are time, space or distance, terrain, weather, relative strength, including the physical and disciplinary factors, such as numbers, morale, communication, supply, and armament. Their proper application constitutes the true measure of military art, and it is the duty of all officers to acquire their true meaning by study, particularly the study of history, by reflection, and by practice, not only in purely military work, but in administration and business operation. All practical military problems, whether on the map or in the field, will be examined, and critiques thereof will mention the manner of the application of the fixed principles of war. All active military operations will be planned and executed in accordance with these principles.⁴⁰

The principles were to be applicable to an extremely broad range of topics, and students at the General Staff College tested their applicability by examining the value of one principle or another during different campaigns of World War I. The principles seemed to be confirmed,

⁴⁰U.S. Army, TR 10-5, Doctrines, Principles, and Methods, 23 December 1921, p. 2.

and military history seemed to have a greater utility than ever. At the General Service School, Fort Leavenworth, Colonel Naylor, whose acceptance of the efficacy of principles was apparent in his enunciating two principles of strategy in 1921, began lecturing in 1922 on "the Marne miracle illustrating the principles of war."⁴¹ He used the War Department's "official" principles in these lectures. Colonel Charles Howland's lectures, also from Fort Leavenworth,

. . . were so well received, not only as a most carefully prepared history of the World War, but as showing the military principles involved in the various campaigns—how their observance made toward victory and their non-observance to defeat—that it was decided to publish [the lectures] in order that the great number of officers who are unable to attend these schools, might profit thereby.⁴²

Howland, too, relied upon the official list as the framework for his discussions.

Shortly after the appearance of the official list, objections to both the concept of a definitive list and the content of the list were voiced and were influential enough to cause first a change in the content of the "immutable" principles (Appendix 7), and in August 1928, the abandoning of the list altogether.⁴³ Some of the criticism had come from the army schools where even the term "principle" was questioned. Lieutenant-Colonel Oliver Robinson commented from Fort Leavenworth,

⁴¹These lectures were published as The Marne Miracle Illustrating the Principles of War (Washington, D.C., 1923).

⁴²Hanson E. Ely in preface to Charles R. Howland, A Military History of the World War (Fort Leavenworth, 1923), p. iii.

⁴³Thomas R. Phillips, "Word Magic of the Military Mystics," Infantry Journal, XLVI (September-October 1939), 403 and U.S. Army, TR 10-5, Doctrines, Principles, and Methods, 15 August 1928.

". . . I have preferred to use the idea as the framework around which to build, rather than the principle, as there is ample ground for doubt as to whether some of them are true principles."⁴⁴

The concept of the principles of war as a definitive list of aphorisms, however, reappeared during the 1930s as on one occasion, the principles of offensive combat (Appendix 8) and as "the principles of strategy for an independent corps or army in a theater of operations" (Appendix 9). The latter publication was especially significant, for it was a part of the curriculum at the Fort Leavenworth Staff School and hence, placed the list concept back into the mainstream of U.S. Army military education. Seven principles were discussed in turn in this publication, and the discussion of the application of the principles contrasted markedly with the discussion that had appeared in Training Regulation 10-5 in 1921. A caveat concerning the principles' applicability was now strongly voiced:

In war we deal with concrete cases. For this reason, the principles of strategy can serve only as a sort of general guide. Each campaign must be thought out and analyzed in all its parts. Out of this analysis should come the decision which can never be deduced from preconceived abstract principles.⁴⁵

In 1939 the staff school presented a similar list, which was introduced with the statement, "There are certain principles of war whose observance is vital in war."⁴⁶ (Appendix 10) The individual principles in

⁴⁴Oliver P. Robinson, The Fundamentals of Military Strategy (Washington, D.C., 1928), p. v.

⁴⁵U.S. Army. Command and General Staff School, The Principles of Strategy for an Independent Corps or Army in a Theater of Operations (Fort Leavenworth, 1936), p. 14.

⁴⁶U.S. Army. Command and General Staff School, The Offensive (Tentative) (Fort Leavenworth, 1939), p. 8.

this list were often referred to by military writers during World War II, and instructors at West Point began using them in their analysis of the battles of the great captains of the Civil War at this time as well.⁴⁷

In 1949 the principles first appeared as a list of aphorisms in the U.S. Army Field Service Regulations. Though surely influenced by the various statements of principles in the training regulations, in foreign publications and at the service schools, this list was the culmination of a trend that had been noticeable in the regulations since before World War I.

The first edition of the U.S. Army Field Service Regulations was published in 1905. As in the handbooks of other western powers at this time, "general principles" appeared throughout the 1905 edition. In the 1913 revision of the Regulations, brief narratives of fundamental ideas pertaining to the conduct of war were printed in a section entitled, "The Principles of Combat." A year later the ideas in the narratives were more clearly identified in brief paragraphs of "principles which apply to both offensive and defensive combat." The next revision of the Regulations was published in 1923, and a section entitled "Combat. General Principles" now contained nine terse, enumerated paragraphs (Appendix 11). A tentative Field Service Regulations was published in 1939, whose section on "General principles" in the chapter entitled, "The Conduct of War," also had nine enumerated paragraphs. Seminal phrases were highlighted by italicized words: the ultimate objective, concentration of superior forces, offensive action, unity of effort, surprise, security, and simple

⁴⁷See United States Military Academy, Campaign Summaries (West Point, 1943).

and direct plans.⁴⁸ The 1941 edition of the Field Service Regulations paralleled the 1939 tentative regulations, but the chapter, "The Conduct of War," was renamed "The Exercise of Command," and the "general principles" became the "Doctrines of Combat." The enumerated sections were reduced from nine to seven (Appendix 12). The 1941 edition also warned, "Set rules and methods must be avoided. They limit imagination and initiative which are so important in the successful prosecution of war."⁴⁹ The 1944 edition of the Regulations differed little from the 1941 edition, but in 1949 the chapter entitled "The Exercise of Command" began with "Section 1. Principles of War." (Appendix 13) No explanation, definition, nor caveat was offered--just nine numbered paragraphs, each center-headed by a bold-faced, capitalized title: THE OBJECTIVE, SIMPLICITY, UNITY OF COMMAND, THE OFFENSIVE, MANEUVER, MASS, ECONOMY OF FORCES, SURPRISE and SECURITY.⁵⁰ Subsequent revisions of the Field Service Regulations brought minor changes in the order, in one title--economy of force replaced economy of forces in 1954--and in the description of the principles, but in essence the U.S. principles have been fairly constant, at least when compared with earlier lists, to the present.

The development of concepts of principles of war in France, Germany and the United States after World War I proceeded at a different pace and in different directions. The goal of each country's

⁴⁸U.S. Army, FM 100-5 (Tentative), Field Service Regulations--Operations, 1939, pp. 27-29.

⁴⁹U.S. Army, FM 100-5, Field Service Regulations--Operations May 1941, p. II.

⁵⁰U.S. Army, FM 100-5, Field Service Regulations, August 1949, pp. 21-23.

doctrine was to achieve victory in a next war, but the methods necessary to reach this goal and the assumptions that formed the basis of each nation's doctrine differed widely. Different views on the efficacy of a list of principles also were apparent within each army, and even after a position was accepted as doctrine, its detractors could always hope with some reason that the next revision would bring military thought closer to the "reality" as they perceived it to be. For a concept that was claimed to be intrinsically eternal, the principles of war experienced an era of extreme uncertainty from the early 1920s through World War II.

After World War II, the list format was widely accepted. In 1947 the Canadian Chiefs of Staff Committee defined a principle as a "guide to conduct" and listed ten principles, identical to the British ten, which, ". . . must always influence a commander in war."⁵¹ Australia and New Zealand adopted similar lists as well. The British Royal Navy and Royal Air Force now had lists, too, for Montgomery had insisted upon interservice agreement on the principles. The U.S. Navy adopted a list that included twelve principles, and the newly-established U.S. Air Force soon adopted its own list. Even Giulio Douhet, whose treatise on air power gave him just claim to the title, "the father of air power," accepted the applicability of "land and sea principles" to aerial warfare. He had written in 1921 that the first principle governing the operation of an independent air force is that it ". . . should always operate in

⁵¹"The Principles of War," Military Review, XXVIII (October 1948), 88. This article originally appeared in the Canadian Army Journal in December 1947.

mass."⁵² He included the following basic principle, too, ". . . which is the same one which governs warfare on land and sea: Inflict the greatest damage in the shortest possible time."⁵³ The attitude of military men in the immediate post-World War II era toward the principles of war was expressed by Captain W. D. Disbrey, an air force group commander, when he wrote,

There is a tendency to assume that the principles of war are basically army principles, which have been adopted by the air forces for convenience. This is not true. The principles of war are the result of the experience of mankind at war throughout the ages, irrespective of the type of weapons employed or the elements in which they are used.⁵⁴

In the early 1960s, enumerated principles appeared for the conduct of guerrilla warfare (Appendix 14). Mao Tse-Tung had discussed the laws of revolutionary war in lectures delivered at the Red Army College in 1936, and even though he enumerated certain problems of strategy (Appendix 15), which given hard thought, he claimed, could be elevated to the "higher plane of principle," he warned,

In studying the laws for directing wars that occur at different historical stages, that differ in nature and that are waged in different places and by different nations, we must fix our attention on the characteristics and development of each, and must oppose a mechanical approach to the problem of war.

We need directors of war who can play a significant role. All the laws for directing war developed as history develops and as war develops; nothing is changeless.⁵⁵

⁵²Giulio Douhet, The Command of the Air, trans. Dino Ferrari (London, 1943), p. 45.

⁵³Ibid., p. 46.

⁵⁴W. D. Disbrey, "The Application of the Principles of War to Air Power," Military Review, XXXI (October 1951), 89.

⁵⁵Mao Tse-Tung, Selected Military Writings, trans. Foreign Languages Press (Peking, 1967), p. 80.

Mao also commented upon the hazards of using principles to solve broad problems of war:

All military laws and military theories which are in the nature of principles are the experience of past wars summed up by people in former days or in our own times. We should seriously study these lessons, paid for in blood, which are a heritage of past wars. That is one point. But there is another. We should put these conclusions to the test of our own experience, assimilating what is useful, rejecting what is useless, and adding what is specifically our own. The latter is very important, for otherwise we cannot direct a war.⁵⁶

In spite of similar warnings voiced by nearly every serious student who has reflected upon the existence of principles of war, the uses of principles and the reliance on principles have proliferated in recent decades. They have been used to facilitate the teaching of military history, as an abbreviated language for the planning and critique of operations, and as the model, both in content and form, upon which doctrine has been established.

Since World War II, neither French nor German thought has embraced a single, definitive list of principles of war, but each of these nations has moved closer to a definitive identification of principles intended to facilitate the study and conduct of war. France, having accepted three principles and five rules in its latest regulation for ground forces, has continued to place a high regard on the mental and behavioral aspects of principles—a tradition that dates from Ardant du Picq's Essai sur le combat and the "lessons" of the French collapse in their war with Prussia. German doctrine likewise maintained a strong link with the thought that prevailed among her leading military men at the conclusion of the Franco-Prussian War by

⁵⁶ Ibid., p. 87.

continuing to reflect the Moltkean--and Clausewitzian--thought that the individual situation, and not unchanging rules must determine correct actions in war.

The history of the development of the modern concept of principles of war must necessarily end with the present. But that the modern concept of those truths essential to the "strategy" of a successful military operation will have a future is certain--as long as inquisitive men seek to affect the destiny of mankind.

Chapter IV

EPILOGUE

This study has focused upon the development and acceptance of the modern principles of war by examining military thought, as expressed in military literature, in official publications, and from the platforms of military schools of the major western services. The forces that ordained and inspired the development and acceptance of the principles are perhaps more significant to the understanding of the modern forms of the principles than their metamorphic chronology, but these forces are also more difficult to identify. Individual authors were instrumental in the development, but often they were either synthesizers of broader intellectual currents or merely articulators of widely-held beliefs. As a rule their ideas were more eclectic than original. Nevertheless, without their dedication to the profession they served, reflection upon the role of principles in the proper conduct of war would have occurred less frequently, and the work of the historian would be considerably more difficult. The principles of war represent one strand in the evolution of military thought from Jomini to Fuller, a strand that is of more than narrow significance when it is recognized to reflect general intellectual currents of western society as well as commonly-held military views.

Antoine-Henri Jomini did not invent strategy nor the belief that strategy is a science based on a few, fixed principles. The word

"strategy" was not used to connote a taxonomical division of war prior to the nineteenth century, but it was not uncommon to speak of a science of strategy when Jomini published his Précis de l'art de la guerre in 1838. Significantly, Jomini spoke of the "art of war" in his title rather than of the science of war. The latter would have suggested a more dominant role of principles, and indeed some authors of the Napoleonic period wrote treatises either on the science of war or on the science of various branches of war. Guibert, for one, wrote that grand tactics was the science of the general in chief.¹ Archduke Charles of Austria wrote that strategy was the science of war and based his works largely on the existence of principles in war. The treatise on war by the French theorist Gay de Vernon was translated into English as A Treatise on the Science of War. Obviously Jomini was aware of the close association of science with war and with branches of war, but he was not so overwhelmed by a belief in science that he would entitle his compendium on war, a science of war. In fact, he defined strategy, the realm in which he spoke of principles, as the "art of making war on the map." Agreement was widespread, however, in the learned world in the early nineteenth century that neither the arts nor the sciences could be cultivated in isolation. A member of the Société d'histoire naturelle suggested that ". . . the word 'science' should be abolished altogether and a new term expressing the intimate union of science with the arts be substituted."² He proposed the term

¹Jean Mordacq, La stratégie, historique évolution (Paris, 1912), pp. 14-15.

²Roger Hahn, The Anatomy of a Scientific Institution, The Paris Academy of Sciences, 1666-1803 (Berkeley, 1971), p. 270.

"connaissances humaines" (human knowledge). In light of this broad trend, Jomini understandably believed that principles existed within the art of war. His subsequent influence upon generations of military men who grew up in a world increasingly dominated by science and technology was also facilitated by this pervasive theme.

Jomini's theories and their subsequent influence on the conduct of operations and especially on the study of war in the post-Napoleonic period was central to the development of the modern forms of principles of war. Spenser Wilkinson, a leading British military intellectual at the turn of the century and later professor of the history of war at Oxford, remarked:

Jomini's analysis and classification of operations, in spite of its artificial terminology, was correct and useful. It was the first scientific exposition of strategy as a system of principles, and it has been used by all the subsequent strategical thinkers. Willisen in Germany and Hamley in England are Jomini's disciples, and the appreciation of Napoleon's campaigns has been for the most part little more than the application to them of Jomini's categories. The formal lore of strategy has been advanced but little since Jomini published his Précis Accordingly the military literature of the nineteenth century is hardly intelligible without a study of Jomini's chapter on strategy.³

Jomini's chapter outlined the fundamental principle of war and the maxims derived from it, and became an important source of the belief that the conduct of war was regulated by a few unchanging laws. The belief in the existence of principles in warfare came to be widely accepted in the nineteenth century, but the forces that shaped the belief differed from nation to nation.

French military thought, for example, was profoundly influenced

³Spenser Wilkinson, The French Army Before Napoleon (Oxford, 1915), p. 14.

by her defeat in the Franco-Prussian War. The defeat also altered French views of principles of war, for the conclusion was drawn that organizational and technological failures were not as responsible as attitudinal and behavioral failures. This lesson led Henri Bonnal and Ferdinand Foch to conclude that the enduring principles in warfare should be concerned more with spirit, morale and attitudes than with purely physical considerations. Thus in France the principle of freedom of action, which applied to the commander's mental set concerning the employment of his forces, was accepted, and an operational principle, such as the enemy army should be the ultimate objective of every campaign, had little appeal.

In Germany, the Jominian belief in the existence of a few, immutable principles governing the conduct of war was eclipsed by the idea advanced by the elder Moltke and other officers that strategy was a system of expediencies that could not be subjected to general rules. Jomini's concept was rejected, and Clausewitz's belief that because war involves living and moral forces, ". . . it can never attain the absolute and positive,"⁴ dominated German thought. Some senior German soldiers, however, did write of principles regulating the conduct of war. These men, Colmar von der Goltz and Rudolf von Caemmerer among them were not representative of a Jominian school in regard to their expostulation of principles, but were led in that direction by trends in late nineteenth century German philosophy, which sought principles that encompassed not only narrow segments of experience like the conduct

⁴ Carl von Clausewitz, On War, trans. J. J. Graham (London, 1968), p. 117.

of war but "experiences of the whole personality."⁵

In a similar vein, Alfred Thayer Mahan believed that "principles" should encompass broad areas of human activity. For example, he held that the principle of concentration applied not only to the military units on the battlefield, but to ships at sea, to the necessity for maintaining the fleet in one ocean and to the massing of facts to insure accurate historical conclusions. Intellectually, these views contrasted sharply with the applicatory methods used in nearly all western military schools, but able instructors often, either consciously or unconsciously, reduced the esoteric ideas of philosophy to concepts acceptable to students with highly practical inclinations. G. F. R. Henderson at the British Staff College and Matthew Steele, an instructor at the U.S. staff college, both displayed this characteristic near the turn of the century, and they both recognized the efficacy of identifying comprehensible "principles" to serve this end. An intellectual basis for the acceptance of principles was established, and in the early years of the twentieth centuries, principles for sundry activities of war were common.

By the end of World War I, the existence of principles in warfare had become widely accepted—at least in the Anglo-American world—and that a brief list of the fundamental principles could and should be articulated seemed to follow as a matter of course. Such positive statements were quickly adopted in Great Britain and the United States, but in France and in Germany, the authors of revised

⁵W. Stark, "Editor's introduction" in Friedrich Meinecke, Machiavellism, The Doctrine of Raison d'etat and its Place in Modern History, trans. Douglas Scott (New Haven, 1957), p. xi.

doctrine saw more danger than benefit in a brief list of positive rules. Yet the trend toward the more definitive statement of principles of war was apparent in most western nations throughout the first half of the twentieth century.

In addition to synthesizing broader intellectual currents, individual writers often articulated commonly-held views. Throughout the military services and especially in military schools and other doctrine-producing agencies, such as the war departments and special study groups, concepts like the principles of war were subjected to extensive review, comment and possible rejection by a multitude of superiors and collateral agencies before they could appear and become institutionalized. Thus, writers who, on the one hand, reflected broader intellectual trends, also frequently presented views shared by many of their contemporaries. Original ideas appeared in some of the theoretical literature, but most theorists either borrowed from other fields or from other nations. They also frequently expressed ideas that were popular in their own right and void of controversy. Hence the military schools served as the focal point of development, for a prime opportunity for thought and reflection leading to a better understanding of war existed within the service schools that had been established by the end of the nineteenth century. Furthermore, the need for comprehensive texts and other written references stimulated some instructors to write, and many others published their lectures either after they retired from teaching or after their views became well-accepted. Books on the theory of war proliferated like the schools that spawned them, but the books sometimes generated more criticism than learning. For some observers, the books that tried to reduce complex

topics to enumerable considerations were pedantic. For practical men, the same books were valueless abstractions which, though they could be useful in helping men pass required examinations of one sort or another, discouraged them from thinking and hardened a prevalent attitude that generals are in fact born and not made. "Traditionally military machines have always rejected intellectual grit."⁶ In spite of these views, however, other forces placed enumerable concepts in a favorable light.

Scientific methods and attitudes influenced military education, and throughout the nineteenth century, the gap between science and its military applications consistently narrowed.⁷ Scientific and technological developments demanded that new specialized military schools be founded, and science dominated the early curricula, thus strongly influencing military thought. A science based on a few, immutable principles could be readily learned, and by the late nineteenth century courses addressing the study of war focused on the identification of such principles. In addition to being scientific, the principles furnished ". . . what the military side of this busy world so much needs, a short-cut to general knowledge of a vast subject."⁸ The "scientific shorthand" seemed to please the pedagogues as well as the profession at large.

⁶K. Booth, "History or Logic as Approaches to Strategy," Journal of the Royal United Service Institute for Defence Studies, CXVII (September, 1972), 34.

⁷See Hahn, p. 275.

⁸George F. MacMann, "Forward" in R. A. E. Voysey, An Outline of the Principles of War (Diss, England, 1934), p. v.

Two other forces interacted closely with the development of the modern principles of war: the first was the adoption of new methods of military instruction inspired largely by the recognition of Prussia as the model of all things military, and second, the influence of rapid technological developments of the late nineteenth and twentieth centuries on the conduct of war. Prussia's victories in her wars with Denmark in 1864, Austria in 1866 and France in 1870-71 placed her at the zenith of the military powers. Her general staff was envied and emulated by great and lesser services alike. Her military educational system impressed foreign military observers, and the applicatory method which relied on practical and participatory instruction was soon heralded as the best method of instruction throughout the western world. Learning by doing was the key. But although Prussian officers like Peucker, Verdy du Vernois and Moltke, maintained that each case required its own evaluation and solution, English and American officers seemed able to combine a belief in principles of universal validity with the applicatory method and pragmatism.

In the advanced military schools of Great Britain and the United States, the purpose of studying individual cases was to determine the general principles illustrated by the case. The case method was often indistinguishable from the applicatory method, but important differences existed between the two. The former called for the study of specific cases, usually drawn from history, from which enduring lessons were to be learned. The latter method also used specific cases, usually drawn from history, and required the student to make periodical decisions and to take prescribed actions that allowed him to "apply" the knowledge gained from earlier experience. The goal of the latter method was also

to teach enduring lessons. By the early twentieth century, law schools relied heavily upon the case method, and medical schools relied heavily upon a form of the applicatory method. Schools of war attempted to use the best of both methods, for each had its limitations when violence and man as antagonist were involved. The case method failed to give the military student the flavor of the dynamics of war, and the applicatory method could only imitate the battlefield since the major ingredients of battle, the enemy and the friction of war, could only be simulated. In both methods, however, military history was called upon to be the surrogate laboratory for the study of war. From historical examples and reconstructions, students were encouraged to seek the principles which had led to the great victories of the past. Eben Swift, an instructor and later commandant of the U.S. staff college observed in 1904:

The old idea of teaching the art of war as a doctrine is changed. Now the higher theory as taught by the books is put aside and we study the campaigns first, and pick out the strategy afterwards, thus reversing the former method. Here then we have a brilliant example of the study of principles by their application. It was [Napoleon's] own practice as we now know, but the added importance of the study of military history in the curriculum of the war college is a recent idea.⁹

Thus out of the Prussian experience came not only increased attention to the study of military history, but also the search of history for principles of war.

A second factor that at the least paralleled the development of

⁹Eben Swift, "Remarks Introductory to the Course in Military Art, at the Infantry and Cavalry School and Staff College, Fort Leavenworth, Kansas," Lectures delivered at the Infantry and Cavalry School by Instructors, and Student Officers of the Staff College during November and December 1904 (n.p., n.d.), pp. 14-15.

the principles of war was the influence of the technological advances which occurred during the formative period of the modern principles. The rapidity of change in the conduct of war brought about by technological advances in the late nineteenth century created an atmosphere in which the "unchanging" was held in high regard.

When we lose the comfortable formulas that have hitherto been our guides amid the complexities of existence, . . . we feel like drowning in the ocean of facts until we find a new foothold or learn to swim.¹⁰

Principles provided such footholds, and especially after the adoption of the official lists of principles of war, many instructors expressed the view that the principles served as the firm foundation of both the theory of war and the study of military history.

While the rapidity of technological change suggested the necessity for the identification of clear principles to some, the nature of the changes suggested the need to others. The replacement of sail by steam brought a certainty to the navies of the world. Railroads provided general staffs with the capability of planning mobilization schedules that allowed troop concentrations at critical areas to be calculated to the minute. Breechloading weapons facilitated the tasks of the riflemen and artillerymen; better cartridges and explosives improved both accuracy and reliability. The telegraph, and later radio, provided faster and more reliable communications than had been previously known. The tank and aircraft brought accurate determinations of movement rates to and on the battlefield. The impact of each of these technological advances, and other lesser discoveries, upon the theory of war

¹⁰ Werner Sombart, The Quintessence of Capitalism, trans. and ed. M. Epstein (London, [1915]), p. 354 as quoted in Edward H. Carr, What is History? (New York, 1967).

is difficult to assess, but the progressive trend was toward greater predictability upon the battlefield. That greater predictability should be possible within the metaphysical aspects of war seems to have been made. Many twentieth century teachers believed that the definitive expression of principles served this end.

A further characteristic of the modern battlefield made the definitive expression of principles of war appear efficacious and desirable. Great wars in the past had always required the transition of large numbers of men from sundry callings to the profession of arms. When neither equipment nor methods were too sophisticated, the transition was accomplished with comparatively little difficulty. Among the officers the transition from aristocrat to commander seemed so natural that the Duke of Wellington, for one, feared that the education of officers would disrupt this proven system. Proponents of military education overcame such opposition, but during the mass mobilizations required in the two great wars of this century, military education programs were abbreviated to the point that they became little more than orientations on organizations and on the immediate situation at the front. Staff schools were closed, military history was abandoned and philosophical topics, like the theory of war, were supplanted by highly utilitarian topics. A few "intellectuals" continued to think about the metaphysics of war, and throughout each of the world wars, the need for leaders at all echelons to understand certain basic truths common to a wide range of situations was widely recognized. This recognition contributed to the acceptance of the definitive lists of principles of war in Great Britain and the United States in the early 1920s and the late 1940s. In France and Germany the lists were not

adopted in the immediate post-war periods, but each army placed considerable emphasis on the writing of a new, basic manual for combat leaders.

The myths concerning the origins of the principles of war have been nearly as numerous and pervasive as the interpretations of the principles themselves. The two most widely-held inventions concerning the origins of the principles are: first, that the principles as they existed at one point of time, had always, or at least for a very long time, existed in that form; second, that the modern lists of principles are directly, and according to some commentators, solely attributable to either Clausewitz or to J. F. C. Fuller. The first myth possibly developed from the nature of principles. If a given list or a single principle is accepted, then from the definition of principle, it follows that it must have been valid for all times. That the principles must have been known for all times and accorded similar importance in all times has been too quickly concluded. An American officer commented in 1961:

Principles of war have long been accepted by the world's armies as the basis for tactical doctrine, in spite of major changes in the weapons of war. Even the development of nuclear weapons has failed to dislodge them from their esteemed position.¹¹

If this author was speaking of the nine principles of war, first adopted by the United States in the Field Service Regulations of 1949, which he undoubtedly was, then he failed to recognize that this enumeration of principles of war succeeded rather than preceded the nuclear age. An Indian officer, schooled in British institutions, also wrote in 1961:

¹¹ Emil Edmond, "The First Principle of War," Military Review, XL.I (February, 1961), 12.

[The principles of war] are accepted as the basis of teaching which provides a solution for success in battle. Eminent military thinkers and commanders have endorsed them and have fully quoted them in their writings. Their truth has not yet been seriously questioned. Like the Ten Commandments, the principles are now hallowed and enshrined on the altars of our military schools.¹²

Such emphasis and suggested agelessness of the principles included in the modern official lists placed undue importance on modern interpretations of war and concomitantly, deemphasized perceptions of war that existed in other times. The use of the principles of war as a pedagogic tool contributed greatly to this aberration. Though Frederick the Great undoubtedly knew the value of "surprise," "security" and the "offensive," he began his instructions for his commanders with a discussion of desertion which must certainly have held an extremely high position in his perception of important considerations in war. When a modern list is used to study Frederick's campaigns, his own perceptions tend to be overlooked in favor of modern perceptions. When one of Caesar's or Marlborough's or Napoleon's battles has been analyzed in terms of the application of the modern principles, such as "mass," "simplicity," or "mobility," it is difficult to realize that these commanders did not know the concepts in the form or with the emphasis given to them in later periods. Even though the principles may possess timeless character, they were not known in all times and in all places. An anonymous Prussian general officer perspicaciously observed in 1806:

The art of war certainly, will never become simply a science. The fundamental principles of it may, indeed, hereafter be demonstrated in a more simple manner than has hitherto been done, . . .

¹²J. Nazareth, "A Logical Analysis of the Principles of War," Military Review, XLI (February, 1961), 26.

but, be the existing system what it may, those principles must ever, and necessarily, be modified in the application of them, by political, moral, and physical causes; and men of genius will always find room, in the profession of arms, to display and exert the talents they may have received from nature or acquired by study.¹³

The military student may gain great benefit from the principles, but

"... he should not come to regard them as 'immutable,' much less

should he derive the impression that wars should be conducted on pe-

dantic lines."¹⁴ Even Jomini, though searching for principles evidenced by Frederick's campaigns of a half century earlier, understood that the principles that he identified should not be used to judge commanders of times other than his own. He explained:

There are in my historical chapters, observations on operational plans that are based on the system of magazines, and on all the dispositions that can result from the system; but it should be agreed that if my conclusions are contrary to the maxims established in those days by experience, it is also true that the methods of the generals can not help but be in accord with the principles recognized at the time when they were operating. Their methods, which I shall try to present objectively, should not then be the scale on which my conclusions should be weighed. It is only in the chapters containing my personal observations that the true principles that guide me can be found; all the rest is relative to time and to place.¹⁵

Jomini studied the past to derive the principles of his own day, and he recognized the fallacy of judging the past with principles of a different time and place. This belief contradicted the immutable characteristic of principles that Jomini also set forth. He did not resolve the

¹³ A Prussian general officer, The Spirit of the Modern System of War, with commentary by C. Malortti de Martemont (London, 1806), p. v.

¹⁴ H. G. de Watteville, "The Principles of War," Journal of the Royal United Service Institution, LXXV (May, 1930), 274.

¹⁵ Antoine-Henri Jomini, Traité de grandes opérations, Part III (Paris, 1807), pp. 6-7.

paradox, and it remains unresolved to the present day. In Jomini's later writings, he emphasized the immutable characteristic, and today, the paradox is generally ignored because acceptance of the immutable characteristic of the principles far outweighs consideration of their timebound quality.

The second myth concerning the modern principles involves the role that Clausewitz and Fuller played in their formulation. It is neither surprising nor unusual that Clausewitz has been misinterpreted with regard to principles of war. Translations of his works into English have been poor and have led to frequent misunderstandings of his thought. He has been often misquoted, and due to his untimely death, many of his early ideas appeared without the advantage of reexamination by their matured creator. And until Professor Paret's introduction to the edition of On War by Michael Howard and himself, Clausewitz's long historical works were not seen as a key to the understanding of his theories. Instead, since the adoption of the first British list of principles of war in 1920, numerous authors have claimed to find in Clausewitz's instructions to the crown prince, an intentionally didactic work written for a sixteen-year-old, an enumeration of principles that were similar to principles in the British list. Little else that Clausewitz wrote, especially in his more analytic writings, was drawn upon when labelling Clausewitz the father of the modern principles of war. His thought concerning the principles was further bastardized in a pamphlet published by the Department of Military Art and Engineering at West Point which read:

Clausewitz' principles of war (in addition to that of Unity of Command, mentioned earlier) include the following:

- a. The Objective:
- b. Mass:
- c. Economy of Force:
- d. Surprise:
- e. Mobility:
- f. Simplicity:¹⁶

Clausewitz never presented such a list and repeatedly warned against the adoption of absolute conclusions and rules. For example, in On War in the first chapter, "What is war?" of Book I, "On the Nature of War," he wrote,

Theory must also take into account the human element; it must accord a place to courage, to boldness and even to rashness. The Art of War has to deal with living and with moral forces, the consequence of which is that it can never attain the absolute and positive.¹⁷

Such statements deny the definitive characteristic claimed for the modern lists.

Fuller's contribution to today's principles of war is far greater than Clausewitz's, but it is similarly often misinterpreted. No other single individual did as much to shape the form and content of the modern principles, and Fuller pointed out these contributions with exaggeration and some pride in his published memoirs. It should be recalled, however, that Fuller did not present a single, definitive list of principles of war prior to the publication of the first official British list. The official list must also be credited with the publicity and prestige afforded the principles. Soon after the official list appeared, Fuller used the principles in an attempt to establish a philosophy of war or as

¹⁶Department of Military Art and Engineering, United States Military Academy, Jomini, Clausewitz, and Schlieffen (West Point, 1964), p. 25.

¹⁷Clausewitz, p. 117.

the title of his book stated, a Foundation of the Science of War, but this attempt to broaden the knowledge of war with the principles as the framework had little impact on either the official principles or on the theory of war in general. A contemporary remarked of the work, ". . . its evil outweighs its good because it has become the chief source of inspiration for those who create images of a science of war at which to worship."¹⁸ When Fuller published his memoirs a decade later, he admitted that his enthusiasm for the principles had waned,

. . . for their purpose has been completely misunderstood, mainly because the military and naval literature which has arisen out of them (in the U.S.A. as well as here) has most successfully obscured their aim, use and value.¹⁹

Fuller did not elaborate on the aim, use and value that he intended for the principles, but his writings gave frequent clues. In his memoirs he wrote, ". . . true education consists in training the mind how to think, in place of cramming it with what to think."²⁰ In his journalistic writings during World War II, he complained in a similar vein, "Why do so few soldiers think? Because so many have never been taught to do so."²¹ He foresaw the danger of dogmatic interpretations of the official list, for he was never one to discourage cogitation and reflection. Fuller certainly influenced the modern expression of principles, but he was not the author of the first modern list of principles of war

¹⁸Edward Atlas, "The Shape of War as it Is," Infantry Journal, L (February, 1942), 71.

¹⁹J. F. C. Fuller, Memoirs of an Unconventional Soldier (London, 1936), p. 389.

²⁰Ibid., p. 458.

²¹J. F. C. Fuller, Watchwords (London, 1944), p. 61.

nor one to insist upon their dogmatic application.

The modern battlefield is a confused chorus of cacophony. Filthy sweat, painful exhaustion, utter misery, sickness and death generally characterize the experiences upon that field. For the individual participant, survival is often goal enough, but for the professional leader and the directors of war, the goal must be victory over the trails of the operations, the confusion of battle and ultimately over the enemy force. The task is formidable, and throughout the written history of war, hardly a leader exists who has not known the bitterness of defeat. But in spite of the mercurial nature of the fortunes of war and of the knowledge that for every victor there must be vanquished, writers and teachers, military and civilian, have sought relentlessly to identify the elements of victory and to insure ordered thinking where physical confusion abound. Their efforts often resulted in the charge of pedantry, a scathing criticism in the profession of practical men of action, but the cost of defeat is too great to rebuke any effort that might contribute to success in battle. Extensive educational programs for officers were established, and the reason was extolled above the main entrance to the Ecole spéciale militaire de Saint-Cyr: "They teach themselves to be victorious."²² The modern principles of war were offered to help gain victory and to facilitate the study and conduct of war. Their expression was pedantic in the extreme, but they have remained popular tools in the military schools of many western nations.

²²Translated from A. G. Salisbury-Jones, "The Sandhust of France: Some Impressions of the Ecole Spéciale Militaire de Saint-Cyr," Army Quarterly, (April, 1923), 85.

And we must remember this: they are simply tools. They must remain our servants. They must never become the masters of our thoughts. They are not, as some think, ingredients which will, if compounded in the right proportions, produce a species of victory cake.²³

Few serious students of war have addressed the topic of the principles of war without some warning of their potential danger:

. . . reflexion, self-criticism and determination are not nurtured by maxims or mnemonics. . . . Clear thinking about facts before you—not of rules behind you—and indomitable will are the stuff of the art of war . . . and there is no room for scholastics.²⁴

Jomini, who is certainly deserving of the sobriquet, "the Newton of the military world,"²⁵ himself warned:

Of all the theories on the art of war the only reasonable one is that which, based on the study of military history, lays down a certain number of regulating principles but leaves the greater part of the general conduct of war to natural genius, without binding it with dogmatic rules. On the contrary, nothing is more likely to kill this natural genius and allow error to triumph than these pedantic theories, based on the false notion that war is a positive science and that all its operations can be reduced to infallible calculations.²⁶

Specious knowledge has no place in war, and even though the anonymous authors of the modern lists which have appeared in official publications never intended to stifle thought and reflection upon the conduct of war, "One wishes at least that they had the modesty of the writers of the

²³C. R. Brown, "The Principles of War," United States Naval Institute Proceedings, LXXV (June, 1949), 633.

²⁴R. P. Packenham-Walsh, Elementary Tactics, An Introduction of the Art of War, British School (London, [1932]), p. 16.

²⁵Michael Howard, Studies in War and Peace (New York, 1972), p. 29.

²⁶Antoine-Henri Jomini, Précis de l'art de la guerre, I (Brussels, 1841), p. 12 as translated in Michael Howard, Studies in War and Peace, p. 27.

Holy Gospel, who did not state that theirs was THE Gospel, but only the Gospel according to the writer."²⁷

August Comte, the leading exponent of the positivist school stated, "To know science well, its history must be known."²⁸ To understand the principles of war, their history must be understood. The difficulty inherent in tracing the development of a concept that has taken different forms in different ages and that has been influenced by myriad forces is well recognized. It is also recognized that

The reconstruction of the "inside" of an event, perhaps above all of a mental event, can never be either certain or complete; but it must be attempted if history is to be written.²⁹

The proper form and content for principles of war remains unknown, and even the existence of principles in warfare is occasionally subjected to some doubt. The search for principles in other disciplines may foretell the fate of the principles of war.

After Newton's great discoveries, which had revealed the laws ruling the physical universe, interest focused on finding those which would determine social life. Thus even the power struggle among states was considered to have its laws. The attempt to discover these laws, though condemned to futility because of an erroneous belief in the rationality of human society, resulted in a clearer insight into the nature of diplomacy and in a sharper definition of its tasks.³⁰

²⁷M. J. W. Wright, "The Principles of War--An Analysis," Army Quarterly, LXXX (July, 1960), p. 200.

²⁸As translated from Mordacq, p. 23.

²⁹Walter M. Simon, European Positivism in the Nineteenth Century: An Essay in Intellectual History (Ithaca, 1963), p. 272.

³⁰Felix Gilbert, To the Farewell Address: Ideas of Early American Foreign Policy (Princeton, 1961), p. 92.

Perhaps the continuing quest to understand the principles of war will yield clearer insights and sharper definition to man's understanding of war, and the study and conduct of war will build on a stronger base than has been possible thus far. But to whatever form or content the principles of war may lead, the proper role of theory in war must remain paramount in the minds of teachers and students alike:

Theory must take into account the infinite diversity of actual war and avoid the restrictive character that pertains to any synthesis. Its task is not to produce a guide for action, but to help educate judgment and to provide ideal standards with which to measure and evaluate the forms that war assumes in reality.³¹

When principles can convey the meaning of this truth, the task of the teacher, the student and above all, the soldier, will be greatly facilitated, for war must ever be conducted not only with the body and the technologically sophisticated mechanical extensions of the body, but as much with the mind as well.

³¹Peter Paret, "Clausewitz and the Nineteenth Century," in Michael Howard (ed.), The Theory and Practice of War: Essays Presented to Captain B. H. Liddell Hart on his Seventieth Birthday (New York, 1966), p. 29.

APPENDIXES

INTRODUCTION TO APPENDIXES

The following appendixes provide the lengthy substantive matter contained in enumerated considerations intended to facilitate either the conduct or the study of war that have been cited in the text of this study. They have been excluded from the text because of their length and because the text focuses upon the form of the principles of war rather than upon the content of the various enumerations. The appendixes are typical of a given era or author and are indicative of the forms that contributed to the development of the modern, definitive lists. An exhaustive collection of all such enumerations would be entirely unmanageable.

APPENDIX 1

"THE PRINCIPLES OF WAR"

"The principles of war," British Field Services Regulations, Vol. II, 1920, pp. 14-15.

The principles of war may be summarized as follows:

1. Maintenance of the objective. -- In every operation of war an objective is essential; without it there can be no definite plan or co-ordination of effort. The ultimate military objective in war is the destruction of the enemy's forces on the battlefield, and this objective must always be held in view.
2. Offensive action. -- Victory can only be won as a result of offensive action.
3. Surprise. -- Surprise is the most effective and powerful weapon in war. Whether in attack or defence the first thought of a commander must be to outwit his adversary. All measures should therefore be taken, and every means employed to attain this end.
4. Concentration. -- Concentration of superior force, moral, and material, at the decisive time and place, and its ruthless employment in the battle are essential for the achievement of success.
5. Economy of force. -- To economize strength while compelling a dissipation of that of the enemy must be the constant aim of every commander. This involves the correct distribution and employment of all resources in order to develop their striking power to the utmost.
6. Security. -- The security of a force and of its communications is the first responsibility of a commander. To guard against surprise; to prevent the enemy from obtaining information; to dispose his covering troops so as to allow his main forces to move and rest undisturbed; these are the considerations which must govern his actions in obtaining security. A force adequately protected retains its liberty of action and preserves its fighting efficiency against the day of battle.
7. Mobility. -- Mobility implies flexibility and the power to maneuver and act with rapidity, and is the chief means of inflicting surprise. Rapidity of movement for battle should, therefore, be limited only by physical endurance and the means of transportation available.
8. Co-operation. -- Only by effective co-operation can the component parts of the fighting forces of a nation develop fully their inherent power, and act efficiently towards success.

APPENDIX 2

"THE GENERAL PRINCIPLES OF WAR ORGANIZATION"

"The general principles of war organization," British Field Service Regulations, Vol. I, 1923, pp. 4-6.

1. The first principle of war organization is therefore mobility.
2. The second principle is to ensure unity of effort by all parts of the forces in the field towards the attainment of the common object.
3. The third principle is that the number of subordinates with whom each authority is required to deal personally and directly must be limited.
4. The fourth principle is that central control must be combined with subdivision of labour and decentralization of responsibility, the duties and responsibilities of each individual being clearly defined and limited to those which he can adequately undertake.
5. The fifth principle is to economize military force by utilizing to the greatest extent possible the ordinary machinery of civil life to assist the forces in the field.

APPENDIX 3

"THE TEN COMMANDMENTS OF THE COMBAT UNIT"

Basil H. Liddell-Hart, "The 'Ten Commandments' of the Combat Unit. Suggestions on its Theory and Training," Journal of the Royal United Service Institute, May 1919, pp. 290-292.

1. The combat unit . . . should not be extended into open order, until they are needed to form part of the actual firing line.
2. While advancing prior to forming part of the firing line the chief aim must be to take advantage of all possible cover.
3. Every combat unit which is represented, normally by two of its sections, in the front line must have its objectives and the limits of frontage which will be allotted to it in the future firing line carefully defined beforehand.
4. Protection always.
5. The decision as to the moment and spot at which the units forming the rear lines shall reinforce the firing line rests with their immediate superior commanders.
6. If the leading sections are held up, the supporting sections should not reinforce them direct . . . but should be sent to a flank.
7. If you are held up, open the heaviest possible fire on the enemy's position.
8. Send back reports.
9. Close with the enemy at the earliest possible moment Use their initiative all the time in order to get forward.¹
10. The combat unit must never withdraw unless definitely receiving orders from above to do so.

¹The most important of the ten.

APPENDIX 4

"THE CONCENTRATED ESSENCE OF WAR

(AXIOMS EXPRESSED AS MAXIMS)"

Liddell Hart, B. H. The British Way in Warfare—Adaptability and Mobility, 1932, 219-220.

1. Adjust your ends to your means.
2. Keep your object always in mind, while adapting your plan to circumstances.
3. Choose the line (or course) of least expectation.
4. Exploit the line of least resistance--so long as it can lead you to an objective which would contribute to your underlying object.
5. Take a line of operation which offers alternative objectives.
6. Ensure that both plan and dispositions are elastic, or adaptable.
7. Don't lunge whilst your opponent can parry.
8. Don't renew an attack along the same line (or in the same form) after it has once failed.

APPENDIX 5

"OFFENSIVE COMBAT. GENERAL PRINCIPLES"

U.S. Army, Infantry Drill Regulations (Provisional), 1919, pp. 96-98.

1. The infantry must take the offensive to gain decisive results. Both sides are therefore likely to attempt it, though not necessarily at the same time or in the same part of a long battle line.
2. An infantry that knows how to attack will know how to defend, because it is easier to defend than to attack. The basis of training will be the attack.
3. The infantry attack has as its basis the fighting spirit and aggressiveness of officers and noncommissioned officers with fearless, intelligent leading on their part, and the individual initiative of the private soldier himself.
4. The primary duties of infantry commanders in combat are to maintain direction on their objectives, establish and maintain contact with the units on their flanks, and keep the higher command informed as to the situation.
5. There is no situation which can justify a commander for remaining in ignorance of the situation on his front.
6. Infantry has two general methods of action: fire and movement.
7. The movement of units in the advance to the attack should be by bounds, i.e., successive positions along the axis of movement are selected as intermediate objectives and reconnoitered prior to occupation.
8. Surprise is an essential element of a successful attack.
9. The effect of surprise must be reinforced and exploited by fire superiority.
10. The success of any operation undertaken by a unit depends in a large measure on the degree to which subordinate units lend each other mutual support. The principle of mutual support is of especial application to units in support and reserve which have not been committed to action.
11. The critical points of a hostile defensive system are in general those points which afford extensive observation, either over the defensive zone and its rear or the ground over which the attack must advance; and those points which control the communications of the defensive zone (road centers, villages). Such points are the especially important objectives of the attack.

12. When officers and men belonging to fighting troops leave their proper places to carry back, or care for, wounded during the progress of the action, they are guilty of skulking. This offense must be repressed with the utmost vigor.

APPENDIX 6

"FUNDAMENTAL PRINCIPLES OF WAR"

War Department (U.S.), Training Regulations no. 10-5, Doctrines, Principles, and Methods, 1921, pp. 1-2.

1. The Principle of the Objective.
2. The Principle of the Offensive.
3. The Principle of Mass.
4. The Principle of Economy of Force.
5. The Principle of Movement.
6. The Principle of Surprise.
7. The Principle of Security.
8. The Principle of Simplicity.
9. The Principle of Cooperation.

APPENDIX 7

"THE PRINCIPLES OF WAR"

C. V. Bundel, "Principles, Methods and Doctrines, of War," Lecture delivered at the Army War College, Washington Barracks, D.C., February 12, 1927, p. 12.

1. The Principle of the Objective.
2. The Principle of the Offensive.
3. The Principle of the Mass.
4. The Principle of Economy of Force.
5. The Principle of Fire and Movement.
6. The Principle of Surprise.
7. The Principle of Simplicity.
8. The Principle of Security.
9. The Principle of Cooperation.

APPENDIX 8

"PRINCIPLES OF OFFENSIVE COMBAT"

Tactics and Technique of Infantry in Offensive Combat, U.S. Army Extension Course, 1931, pp. 2ff.

1. Reconnaissance. — Reconnaissance, by means of which a commander gains information of the terrain and of the enemy confronting his command, will begin prior to, and continue throughout, an attack. Every commander, no matter what his unit, makes personal reconnaissances. Reconnaissance patrols are employed in almost all situations, and each is given a mission.
2. Security. — Security is closely related to reconnaissance, since measures adopted to obtain information afford considerable protections. However, each commander is directly responsible, regardless of provisions made by higher commanders, that his own unit is made secure.
3. The Offensive. — Infantry troops must be aggressive, and must usually take the offensive in order to obtain decisive results.
4. Surprise. — The principle of surprise requires that every effort be made to catch the enemy unaware, both in launching an attack and in carrying it through to a successful completion.
5. Fire and Movement. — In offensive combat, to reach the enemy and overcome him in close combat is the object of infantry. To reach him, it uses a combination of fire and movement.
6. Mutual Support. — Mutual support, like other forms of cooperation between units, increases the chances of success. The application of this principle requires that an infantry unit, regardless of its size, assist others adjacent to it in getting forward.
7. Holding Advantages Gained. — If an attack is a success, commanders of all infantry units must clinch the advantages gained by the enemy's discomfiture. One of the most important and valuable means to accomplish this is the reserve.
8. Simplicity. — Simple plans are likely to succeed; and, conversely, complicated schemes are liable to fail.
9. Unity of Command. — It is a well-established principle that there shall be only one commander for each unit, and one commander in each zone of action, who shall be responsible for everything within his unit or within his zone of action.
10. Reserves. — That adequate reserves should be withheld during the initial stage of the attack, in order to provide a means of influencing the latter course of the action, is an important doctrine.

APPENDIX 9

"THE PRINCIPLES OF STRATEGY"

U.S. Army Command and General Staff School, The Principles of Strategy for an Independent Corps or Army in a Theater of Operations, 1936, p. 9.

1. The importance of offensive action.
2. The importance of concentration of combat power.
3. The importance of economy of force.
4. The importance of mobility.
5. The importance of surprise.
6. The importance of security.
7. The importance of cooperation.

APPENDIX 10

"PRINCIPLES OF WAR"

Command and General Staff School, The Offensive (Tentative), 1939,
p. 9ff.

1. Principle of Security. -- We must assure national security or we shall cease to exist as a nation. National security is obtained through the avoidance of war and preparedness to meet war. The security of a military force in the field lies in a correct estimate of all enemy capabilities with the provisions made to meet them; in maintaining freedom of movement, as well as in guarding against surprise.
2. Principle of the Offensive. -- Decisive results are obtained only by the offensive. . . .
3. Principle of Superiority. -- This principle is applicable to both offensive and defensive warfare. Superiority is vitally necessary to success when the national attitude is offensive. This statement applies both to the nation and to the armies in the field. . . .
4. Principle of the Unity of Effort. -- Unity of effort is necessary to apply effectively the full power of the available forces. Complete unity of the nation in war implies a single control for each effort and a uniting of all efforts under one head. In the armed forces it is attained through unity of command. Where this is impracticable, dependence must be placed on co-operation.
5. Principle of the Common Objective. -- There must be a common objective for all efforts. This objective is defined by the political objective of the war which must be clearly understood. For the nation, the common objective is usually secured through destroying the enemy's will to continue the war. For an armed force the military objective is the destruction of the hostile armed force. This may be secured either by direct action or an indirect approach, such as the occupation of an area vital to the continued existence of the hostile armed force. In conducting military operations, definite points, lines, or areas must be designated for the coordination of effort.
6. Principle of Simplicity. -- There must be simple conceptions and the use of simple methods in war. In the excitement and confusion of war, complicated actions greatly increase the chance of error. The strength of a plan of operations is no greater than that of one of its subordinate parts, and if any part gives way because of an error or misunderstanding the whole plan may fall.

APPENDIX 11

"COMBAT. GENERAL PRINCIPLES"

U.S. Army, Field Service Regulations, 1923, pp. 77-78.

1. The ultimate objective of all military operations is the destruction of the enemy's armed forces by battle.
2. Concentration of superior forces, both on the ground and in the air at the decisive place and time, creates the conditions most essential to decisive victory and constitutes the best evidence of superior leadership.
3. Decisive results are obtained only by the offensive.
4. Numerical inferiority does not necessarily commit a command to a defensive attitude. Superior hostile strength may be overcome through greater mobility, higher morale, and better leadership.
5. All combat action must be based upon the effect of surprise.
6. The necessity for guarding against surprise requires adequate provision for the security and readiness for action of all units.
7. The effect of surprise must be reinforced and exploited by fire superiority.
8. The necessity for concentrating the greatest possible force at the point of decisive action requires the strict economy in the strength of forces assigned to secondary missions.
9. The task assigned to any unit must not involve a complicated maneuver. Simple and direct plans are alone practicable in war.

APPENDIX 12

"THE EXERCISE OF COMMAND. DOCTRINES OF COMBAT"

U.S. Army, Field Service Regulations--Operations, 1941, pp. 22-23.

1. The ultimate objective of all military operations is the destruction of the enemy's armed forces in battle. The ability to select objectives whose attainment contributes most decisively and quickly to the defeat of the hostile armed forces is one attribute of the able commander.
2. Simple and direct plans and methods with prompt and thorough execution are often decisive in the attainment of success.
3. Unity of command obtains unity of effort which is essential to the decisive application of full combat power of the available forces. Unity of effort is furthered by full cooperation between elements of the command.
4. Through offensive action a commander exercises his initiative, preserves his freedom of action, and imposes his will on the enemy. . . . Superior hostile numbers may be overcome through greater mobility, better armament and equipment, more effective fire, higher morale, and better leadership. . . .
5. Concentration of superior forces, both on the ground and in the air, at the decisive place and time and their employment in a decisive direction, creates the conditions essential to victory. Such concentration requires strict economy in the strength of forces assigned to secondary missions. . . .
6. Surprise must be sought throughout the action by every means and by every echelon of command. It may be obtained by fire as well as by movement. . . .
7. To guard against surprise requires a correct estimate of enemy capabilities, adequate security measures, effective reconnaissance, and readiness for action of all units. . . .

APPENDIX 13

"THE EXERCISE OF COMMAND. SECTION 1. PRINCIPLES OF WAR"

U.S. Army, Field Service Regulations--Operations, 1949, pp. 21-23.

1. The Objective. -- The ultimate objective of all military operations is the destruction of the enemy's armed forces and his will to fight. The selection of intermediate objectives whose attainment contributes most decisively and quickly to the accomplishment of the ultimate objective at the least cost, human and material, must be based on as complete knowledge of the enemy and theater of operations as is possible for the commander to gain by the exploitation of all sources and means of information available to him.
2. Simplicity. -- Plans should be as simple and direct as the attainment of the objective will permit. Simplicity of plans must be emphasized, for in operations even the most simple plan is usually difficult to execute. The final test of a plan is its execution; this must be borne constantly in mind during planning.
3. Unity of Command. -- Unity of command obtains that unity of effort which is essential to the decisive application of the full combat power of the available forces. Unity of effort is furthered by full cooperation between elements of the command. Command of a force of joint or combined arms is vested in the senior officer present eligible to exercise command unless another is specifically designated to command.
4. The Offensive. -- Through offensive action, a commander preserves his freedom of action and imposes his will on the enemy. The selection by the commander of the right time and place for offensive action is a decisive factor in the success of the operation. A defensive attitude may be forced on a commander by many situations; but a defensive attitude should be deliberately adopted only as a temporary expedient while awaiting an opportunity for counteroffensive action, or for the purpose of economizing forces on a front where a decision is not sought.
5. Maneuver. -- Maneuver in itself can produce no decisive results, but if properly employed it makes decisive results possible through the application of the principles of the offensive, mass, economy of force, and surprise. Better armament and equipment, more effective fire, higher morale, and better leadership, coupled with skillful maneuver, will frequently overcome hostile superior numbers.

6. Mass. -- Mass or the concentration of superior forces, on the ground, at sea, and in the air, at the decisive place and time, and their employment in a decisive direction, creates the conditions essential to victory. Such concentration requires strict economy in the strength of forces assigned to secondary missions. Detachments during combat are justifiable only when the execution of tasks assigned them contributes directly to success in the main battle.

7. Economy of Forces. -- The principle of economy of force is a corollary to the principle of mass. In order to concentrate superior combat strength in one place, economy of force must be exercised in other places. The situation will frequently permit a strategically defensive mission to be effectively executed through offensive action.

8. Surprise. -- Surprise must be sought throughout the action by every means and by every echelon of command. Surprise may be produced by measures which deny information to the enemy or deceive him as to our dispositions, movements, and plans; by variation in the means and methods employed in combat; by rapidity and power of execution; and by the utilization of terrain which appears to impose great difficulties. Surprise may compensate for numerical inferiority.

9. Security. -- Adequate security against surprise requires a correct estimate of enemy capabilities, resultant security measures, effective reconnaissance, and readiness for action. Every unit takes the necessary measure for its own local ground and air security. Provision for the security of flanks and rear is of special importance.

APPENDIX 14

"THE PRINCIPLES OF GUERRILLA WAR"

Virgil Ney, Notes on Guerrilla War; Principles and Practices, 1962, p. 1.

1. The Environment.
2. Community Security.
3. Community Support.
4. Propaganda.
5. Proximity.
6. Deliberate Delay.
7. Personal Security.
8. Part-Time Function.
9. Modus Operandi.
10. Organization.

APPENDIX 15

"THE PROBLEMS OF STRATEGY"

Mao Tse-Tung, Selected Military Writings of Mao Tse-Tung, 1936, pp. 83-84.

1. Giving proper consideration to the relation between the enemy and ourselves.
2. Giving proper consideration to the relation between various campaigns or between various operational stages.
3. Giving proper consideration to those parts which have a bearing on (are decisive for) the situation as a whole.
4. Giving proper consideration to the special features contained in the general situation.
5. Giving proper consideration to the relation between the front and the rear.
6. Giving proper consideration to the distinction as well as the connection between losses and replacements between fighting and resting, between concentration and dispersion, between attack and defence, between advance and retreat, between concealment and exposure, between the main attack and supplementary attacks, between assault and containing action, between centralized command and decentralized command, between protracted war and war of quick decision, between positional war and mobile war, between our own forces and friendly forces, between one military arm and another, between higher and lower levels, between cadre and rank and file, between old and new soldiers, between senior and junior cadres, between old and new cadres, between Red areas and White areas, between old Red areas and new ones, between the central district and the borders of a given base area, between the warm season and the cold season, between victory and defeat, between large and small troop formations, between the regular army and the guerrilla forces, between destroying the enemy and winning over the masses, between expanding the Red Army and consolidating it, between military work and political work, between past and present tasks, between present and future tasks, between tasks arising from one set of circumstances and tasks arising from another, between fixed fronts and fluid fronts, between civil war and national war, between one historical stage and another, etc., etc.

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